



TERTIARY EDUCATION IN THE CZECH REPUBLIC: MAIN TRENDS AND THE CAUSES OF THE CURRENT CRISIS

Report

Prepared by:

Prof. PhDr. Petr Matějů, Ph.D.

Head of the Department of Education and Social Stratification, Institute of Sociology,
Academy of Sciences of the Czech Republic
and
Chair of the Institute for Social and Economic Analyses (ISEA)

Prof. RNDr. Jiří Zlatuška, CSc.

Former Rector of Masaryk University
Currently: Senator, Vice-Chair of the Committee on Education, Science, Culture, Human
Rights and Petitions of the Czech Senate

PhDr. Walter Bartoš

Member of the Parliament
Chair of the Committee on Science, Education, Culture, Youth and Sport of the Czech
Parliament

with the assistance of :

PhDr. Natalie Simonová and Mgr. Josef Basl

Members of the Department of Education and Social Stratification, Institute of Sociology
Academy of Sciences of the Czech Republic

Prague, March 20, 2006

This report is an extended and updated version of the chapter “The system of tertiary education and the causes of its current crisis” from the volume “On the road to knowledge society” (ISEA, Prague, 2005). It was prepared as a response to *Country Background Report for Czech Republic* for the *OECD Thematic Review of Tertiary Education* prepared by the Centre for Higher Education Studies, Ministry of Education, Youth and Sports of the Czech Republic.

Reforming the socialist system of tertiary education has been more demanding task than expected

Reforms to the system of higher education in East-Central Europe display both common and unique features, with the commonality derived mostly from the similarity of tasks faced by the post-communist countries at the beginning of their transformation. One of these was the need to reform the 'soviet' or 'communist' model of higher education and research. However, it has only now become obvious that transforming the communist-type system of higher education into a modern one - well integrated into the democratic society and knowledge-based market economy - is a task far more difficult and demanding than was expected by educational policy makers, international experts and observers at the beginning of the post-communist transformation [Cerych 2002, Rupnik 1992].

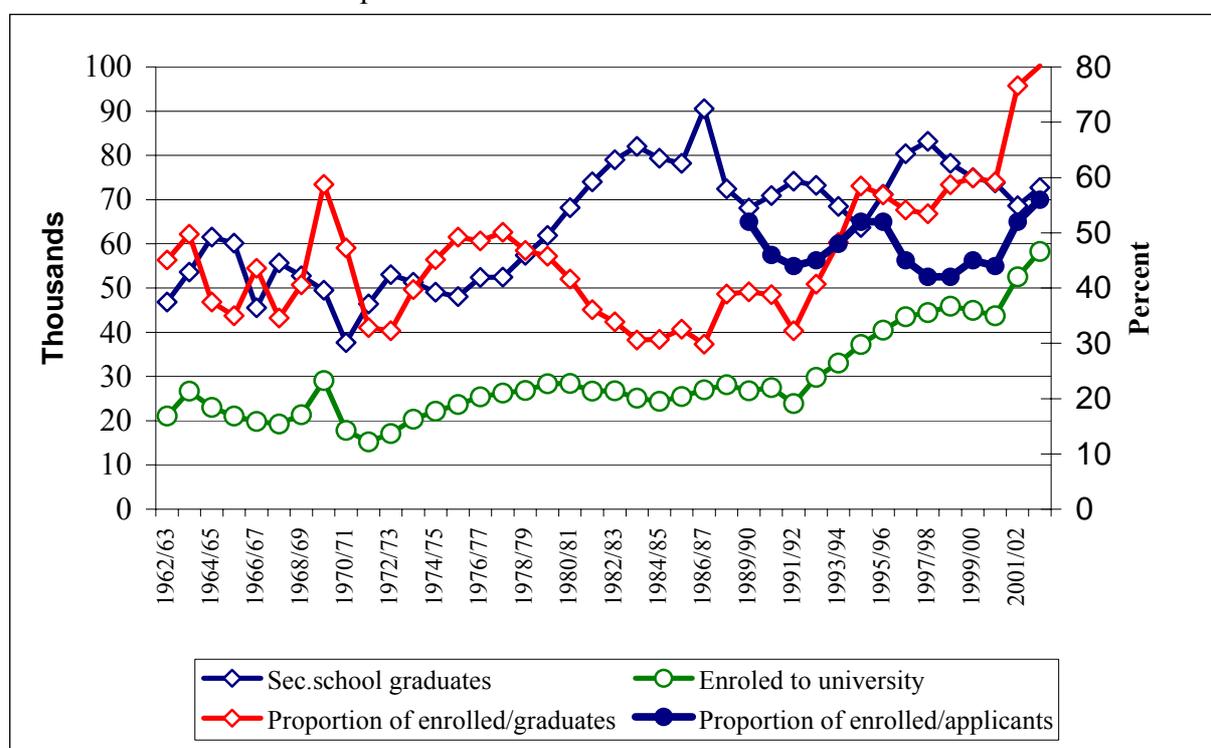
The high level of resistance to changes exhibited by the system, its structure and the self-interests of its major agents (rectors, university senates, faculty, staff, and even students) was combined with the gradual descent of higher education down the list of priorities of both governments and politicians. After more than ten years of transformation in East-Central Europe, it became evident that the issues related to the development of human resources (higher education, research, innovations, technological development, etc.) had relatively low political and voting potential and, as a result, failed to make it to the top of governmental policies and political party agendas, even though they are of extreme importance for the future competitiveness and economic growth of post-communist countries.

This does not mean to say that no significant changes in higher education, its structure, governance, autonomy, openness, financing and - above all - its spirit have been implemented. To understand the difficulties of transformation of higher education systems in post-communist countries, one must take into account the key features of the 'soviet' or 'communist' higher education system inherited from the previous 'regime':

- higher education was heavily centralised within the central planning system - like any other area of economic and social reproduction. Its vital link to the labour market was set by the Central Committee of the Communist Party; consequently, both the overall number of students and their allocation to major fields of study and programmes were decided centrally;
- bureaucratic control over the entire system - balancing the quantity of graduates with the number of offered jobs, displaced job competition and, as a consequence, educational credentials (diplomas, certificates) which became more important in job allocation than the actual knowledge, skills and competencies;
- enormous emphasis on technological (engineering) education narrowed the offer of educational opportunities in the humanities and social sciences; with emphasis on fixed rather than dynamic skills and flexibility;
- curriculum guidelines, research goals and teaching position requirements (including political criteria) were defined and closely monitored by the Communist Party and its state apparatus; the lack of academic freedom and autonomy seriously undermined the capacity of higher education and research to supply the economy with research results applicable in technological development and innovations;
- a 'unitary' system of traditional university education (predominance of long engineering or master degree programmes), the absence of short bachelor degree programmes; the system did not recognise college or similar types of higher education institutions;

- decisions about the number of admitted students and enrolment procedures were based on central guidelines, for a long time (until the mid-1960s)¹ there were quotas set by the Communist Party Central Committee for controlling the proportion of students from various social backgrounds (the goal was to ensure an 'appropriate' proportion of students with class background corresponding to the social class share within the population);
- higher education and academic research were artificially separated, so-called basic research was carried out in the research institutes of the Academy of Sciences, while universities were deprived of research funding and participation in research projects;
- the financing of universities was totally dependent on the government, taking the form of 'incremental budgeting', i.e. the annual budget of each university was equal to that of the previous year (budgetary base) plus a certain increment (very much dependent on their success in negotiations and on available resources).²

Figure 1: Secondary school graduates, enrolled to university, and the proportion of enrolled between 1962 and 2003 in the Czech Republic. Both graduates and enrolled include part-time students



Sources: Vývojová ročenka školství v České republice 1989/90 - 2002/03 [Yearbook of education development in the Czech Republic 1989/90 – 2002/03]. 2003. Praha: ÚIV. Statistika školství z let 1962 až 1989 [Education Statistics from the Years 1962 to 1989]. Praha: Ústav školských informací [Institute of Information on Education]. Historická ročenka školství v České republice 1953/54 – 1997/98 [Historical Yearbook of Education in the Czech Republic 1953/54 – 1997/98]. 1998. Praha: ÚIV.

The stagnation of the socialist university system, and its failure to respond to educational aspirations and to the actual demand for tertiary education, are well demonstrated in Figure 1,

¹ A similar principle (based on the so-called preferential points for social background and political activity) was applied even after the quota system was officially abolished, particularly during the 'normalization period' after 1969.

² This procedure and other aspects of change in financing higher education in the Czech Republic are documented in Holda, Cermakova, & Urbanek, 1994.

which shows the numbers of secondary school graduates and enrolled university students, and also the ratio of enrolled university students to secondary school graduates between 1962 and 2003. The data clearly confirm the policy of keeping the number of university students very low up until the collapse of the Communist regime in 1989, with the only exception being the academic year of 1968/69, when – as a result of the ‘Prague Spring’ – the control of the Communist Party over the university system was less rigid, but tightened again after the Russian invasion in 1968. The chances of making the transition to tertiary education (defined as the ratio of enrolled students to high school graduates) were reduced in the 1980s when the number of high school graduates began to grow. In spite of the sharply increasing number of enrolled university students after the collapse of the Communist regime in November 1989, the capacity of the university system - still trapped in its traditional 'unitary' and 'elitist' structure – was unable to cope with the quickly growing demand for tertiary education. Therefore, the relative chance of making the transition dropped again to its average pre-1989 level.³⁾

First stage of the reform: towards academic freedom

Starting in 1989, the transition to democracy and a market economy brought about significant changes within the society, and also in the higher education system. The Higher Education Act of 1990 created room for a return to democratic control of higher education. It eliminated political control over university activities and decision making processes and reduced significantly the government role, thus creating much larger room for the academic bodies. The Act restored university senates as representatives of faculty, students and staff, granting them a high level of control over the curriculum, hiring practices and research goals. The Act also provided universities with the freedom to make their own financial decisions. The Ministry of Education allocates funds to universities, which in turn are responsible for their distribution and spending. The fiscal freedom framework also implies that the government allocates the funding without stipulating the number of students the universities should educate [see Holda, et al., 1994 for details].

Though this Act opened the way to the modernisation of Czech higher education, many of the structural problems remained unresolved. First of all, the system did not change its 'unitary' character; unlike most of the advanced countries, where bachelor programmes were established primarily in order to open the tertiary system to the sharply increasing numbers of applicants and to meet the changing demands for more practical skills, the number of students enrolled in these types of programs in the Czech Republic grew very slowly until 2001 when the amendment to the 1998 Act obliged universities to speed up the Bologna process (see Table 1). A faster transition to a binary (or two-tier) system, as the key prerequisite for a significant growth of opportunities in tertiary education in the Czech Republic, would have required stronger legislative support for establishing the non-university sector within tertiary education. The Act of 1990 did not go that far.

³ The immense growth of the number of high school graduates after 1995, well illustrated by the figure, can be explained, among other things, by the creation of room for so-called 'long-gymnasia', established in 1990, which were academically oriented high schools with a programme lasting eight or six years, picking-up students before they finished elementary school lasting nine years (a standard gymnasium has only four years and students are recruited only from those leaving ninth grade).

Table 1: Number of students at different levels of tertiary education in the Czech Republic 1992-2004

Academic year	All students	All undergraduate students	Proportion of students in bachelor programs ¹	Proportion of postgraduate students ²
1992/1993	117,637	114,185	11.0	2.9
1993/1994	127,137	122,456	12.8	3.7
1994/1995	136,566	129,453	21.7	5.2
1995/1996	148,433	139,774	24.9	5.8
1996/1997	166,135	155,868	23.5	6.2
1997/1998	173,826	162,373	24.3	6.3
1998/1999	193,036	179,089	18.1	7.2
1999/2000	196,195	181,601	18.4	7.4
2000/2001	199,825	184,000	18.6	7.9
2001/2002	211,545	194,312	20.6	8.2
2002/2003	225,122	206,240	26.7	8.2
2003/2004	244,891	209,971	38.9	8.4

1. Proportion of students in bachelor programs from all undergraduate students

2. Proportion of postgraduate students from all students.

Source: Ministry of Education, Youth and Sport.

The Act of 1990 did not introduce any standardised, compulsory component in entrance examinations. While universities had full autonomy in drafting their entrance examinations and tests, the matriculation examinations at the end of secondary education remained incommensurable both in structure and results. Under the conditions of a significant surplus demand, the absence of nationally administered tests at the end of secondary education, or upon entry into the tertiary level, undermines the transparency of the admissions process and opens up considerable space for more or less subtle forms of corruption.

The Act also failed to create a legislative framework for private universities or colleges. Though there were no legislative obstacles to establishing private colleges, the Act did not provide for their eligibility to apply for the 'state accreditation', which allows, among other things, the issuance of degrees recognised by the Ministry of Education. This Act also made no major progress in resolving the institutional separation of teaching and research. Though universities were authorised to provide post-graduate training, most of the state-funded research remained concentrated at the Academy of Sciences, and that is why the number of post-graduate students grew so slowly after 1990 (see Table 1).

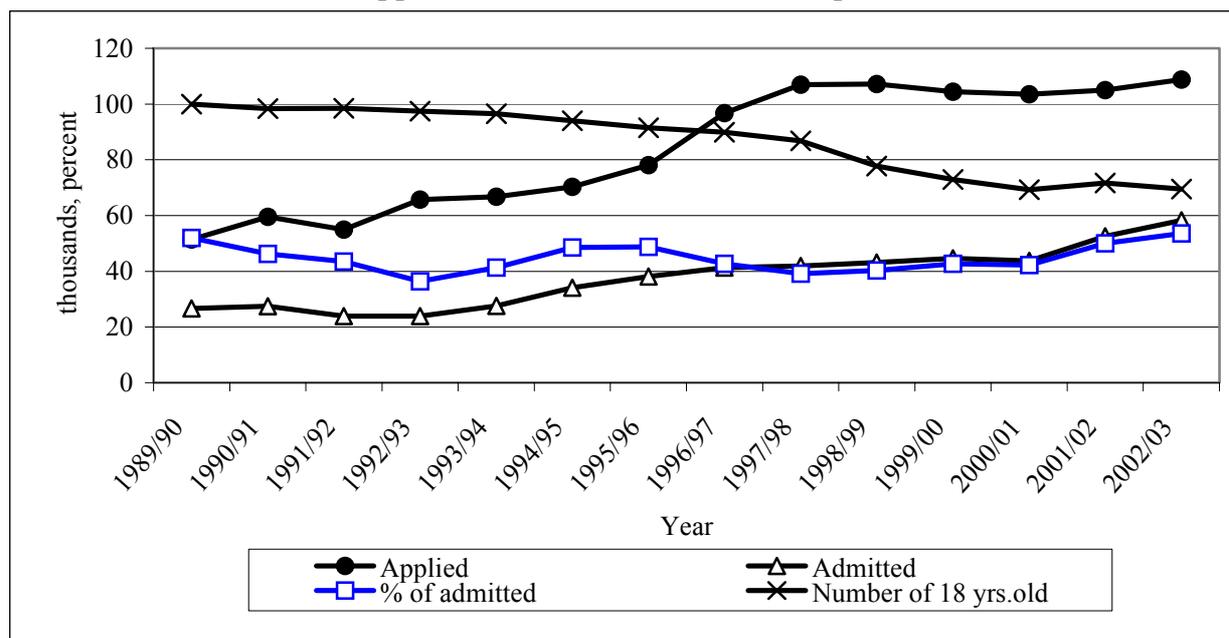
One positive, though at that time rather controversial, decision was that of enabling regional decentralisation by establishing 'regional universities'. The proportion of students in traditional university centres (Prague, Brno, Olomouc, Ostrava) began to drop as regional educational centres increased their enrolments in more practically oriented programmes.

As for the overall impact of the Higher Education Act of 1990 on the development of higher education in the Czech Republic, assessments should be rather cautious, in particular with respect to its impact on the financing and accessibility of higher education. One may agree that "The importance of the law ... cannot be overstated. It put substantial decision-making power back into hands of the university and its faculty and students. The law emphasized academic rights and freedoms as important principles of democracy, and envisioned democracy in terms of self-government and autonomous decision making within the higher education community" [McMullen et. al, 2000: 63]. There is, however, an equally justified objection that the almost complete self-government granted to universities in advance of a much deeper and more consistent reform of the system made future reforms more difficult if not impossible. The subsequent development justified this concern. The Czech Republic was

not the only country where "the autonomy granted to universities was used – or perceived to be used – to block reform" [Scott 2002: 146].

The first signals that consistent and often painful reforms may not receive sufficient support appeared in 1994. At that time, universities were facing serious austerity, the number of applications grew much faster than the ability of schools to meet the rising demand (Figure 2), while supplementary financial resources were either outlawed (tuition fees) or not sufficiently explored and used (commercialisation of research). It became clear that the future growth of higher education would not be possible without a substantial reform of its financing.

Figure 2: Number of applicants for tertiary education, admitted students, and ratio of admitted to the applied after 1989 in the Czech Republic



Source: Institute for Information on Education (UIV).

For this reason, in 1994, a group of economists and policy makers drafted a proposal for a substantive reform of university financing designed to implement a system similar to the Australian Higher Education Contribution Scheme (HESC). In spite of being initially commissioned by the Committee for Education and Science of the Czech Parliament, this proposal never reached the form of a Bill submitted to Parliament for debate. This was due mainly to the strong lobbying of university rectors and senates against the idea, which – as they claimed – would enable the disengagement of the state from financing higher education and burden students and their families with steadily growing tuition fees. The university administration was also uneasy about the idea of tuition fees collected by the state and then redistributed back to universities as part of the state subsidy. Economic incentives brought about by this system were not seen as compensating for the pressure towards higher accountability and responsibility tuition fees would certainly introduce.

Second stage: more autonomy and persistent barriers to multi-source financing

The new Higher Education Act, passed by the Czech Parliament in April 1998, went even further in strengthening the (formal) autonomy of universities, without giving them larger fiscal autonomy and opening new (particularly private) sources of their financing. Although universities became 'public legal entities' with extensive property rights, serious restrictions were imposed on the use of this property in generating revenues, especially through participation of universities in private ventures the Act of 1998 in fact suddenly blocked

universities from establishing spin-off companies, though some of them had done so. This – along with the legal obstacles to collecting regular tuition fees from full-time students enrolled in accredited programmes – made it difficult to change multi-source financing from only a catchword to real practice.⁴ Even though universities were allowed by the state to earn money through various activities (conferences, consulting, publishing, research, bookstores, exams, licensing agreements, etc.) and to keep the additional income, exempt from taxation, in their own institutional accounts [see e.g. McMullen and Prucha, 2000: 64], the two principal sources of multi-source financing, specifically tuition fees and profits from spin-off companies, remained essentially untapped. In other words, Czech universities received more formal autonomy and even extensive property rights, but their financial dependence on the state remained unchanged.

A markedly pro-reform oriented provision of the 1998 Act – the legal recognition of 'non-university institutions of higher education' (colleges), building their profile primarily (though not exclusively) on bachelor programmes – made room for a non-university segment of tertiary education. Nonetheless, this provision did not bring any significant changes to the structure of Czech tertiary education. Though the demand for bachelor programmes was steadily increasing and the transition of the tertiary system of education from a 'unitary' to a 'binary' model was recommended to all European countries by the Bologna declaration, until now only one *public* 'non-university institution of higher education' has been established.⁵

Quite the contrary – the number of students in bachelor programmes at the existing universities dropped after 1997, with no clear tendency towards steady growth until 2002 when the amendment to the 1998 Act has taken effect. It turns out that the resistance in the Czech Republic of public universities and the state administration to structural changes that would open the way to the expansion of higher education is immense.

Non-university sector of tertiary education has been gradually filled by tertiary professional schools (TPS) and private colleges. Tertiary professional schools (TPS), providing non-university tertiary education, represent the youngest segment of the Czech educational system. TPS were officially established in 1996, when post-secondary school leaving exam education (leading to a second maturita) was abolished. From 1990, this type of education had been experimentally tested at 12 schools in the Dutch-Czech Project for the development of professional tertiary education.

Legally, TPS form part of regional education and are administered by the MYES Secondary and TP Schools Section, but they have simultaneously been included in tertiary education, with the terminology and legislation analogical to universities. Therefore, the schools are financed by means of regional normatives stipulated annually by the MYES. The TPS per student normative is lower than for a similar bachelor's program student, although the studies are practically oriented and therefore financially more demanding. All TPS analyses so far have only focused on quantitative indicators, qualitative and above all system analysis is

⁴ The Higher Education Act of 1998 permits the charging of regular tuitions fees only to participants in so-called life-long education programmes. However, these programmes are strictly separated from the accredited programmes (i.e. taking courses in these programmes does not lead to a bachelor's or master's degree) and the participants cannot obtain the status of students, with all the related responsibilities and benefits. Another kind of fees universities may charge, are in fact penalties for staying longer than the 'standard length of the programme'. Curiously enough, universities were reluctant to charge these fees, with the anticipated effect of more rapid growth in the number of students remaining in schools than the number of newly enrolled applicants.

⁵ The Bologna Declaration, signed in 1999 by the authorities responsible for higher education in twenty-nine European countries, setting as its main long-term goal the promotion of the creation of European Higher Education, put forward the following objectives: the adoption of a system of easily readable and comparable degrees; the adoption of a system based essentially on two main cycles, undergraduate and graduate; the establishment of a system of credits; the promotion of mobility by overcoming the obstacles to effective free movement; the promotion of European co-operation in quality assurance; and the promotion of the necessary European dimensions in higher education.

missing. They only describe the current situation without sufficiently pointing out the actually schizophrenic position of this higher education segment in the Czech Republic. And this segment might become the most dynamically developing higher education segment, responding flexibly to demand for non-university professionally focused education. Forecasts and comparisons with the current models of non-university professional education in the EU are missing ponderably. This fact is not even mentioned in the National Report on Tertiary Sector in the Czech Republic.

The future development of TPS compared to similar organisations in the EU should on the one hand focus on the return to 2 to 3 year professional education cycles (which would require the Education Act to be amended), and, on the other hand, on opening the possibilities to transfer the three-year programs to a credit system to facilitate their practical transfer into the tertiary education segment. This, however, is impossible without legislation facilitating the vertical mobility of TPS students to university bachelor's or master's programs, which would correspond to the trend in most EU countries. This would also open the so far blocked possibility for TPS students, quoted in the MYES materials as part of tertiary education sector, to also use all the opportunities and advantages for university students (board, accommodation, participation in European university projects, scholarships, etc.). This is also related to the requirement to renew the Fund for the TPS Development and to set comparable criteria for accreditation of TPS study programs that would lead to their genuine and unpretended integration into the tertiary education system in the Czech Republic.

Many TPS began to strive for transformation into non-university tertiary schools. The public administration reform virtually halted this process, however, because they were transferred under the Regions' competencies whereas universities received the public body status.

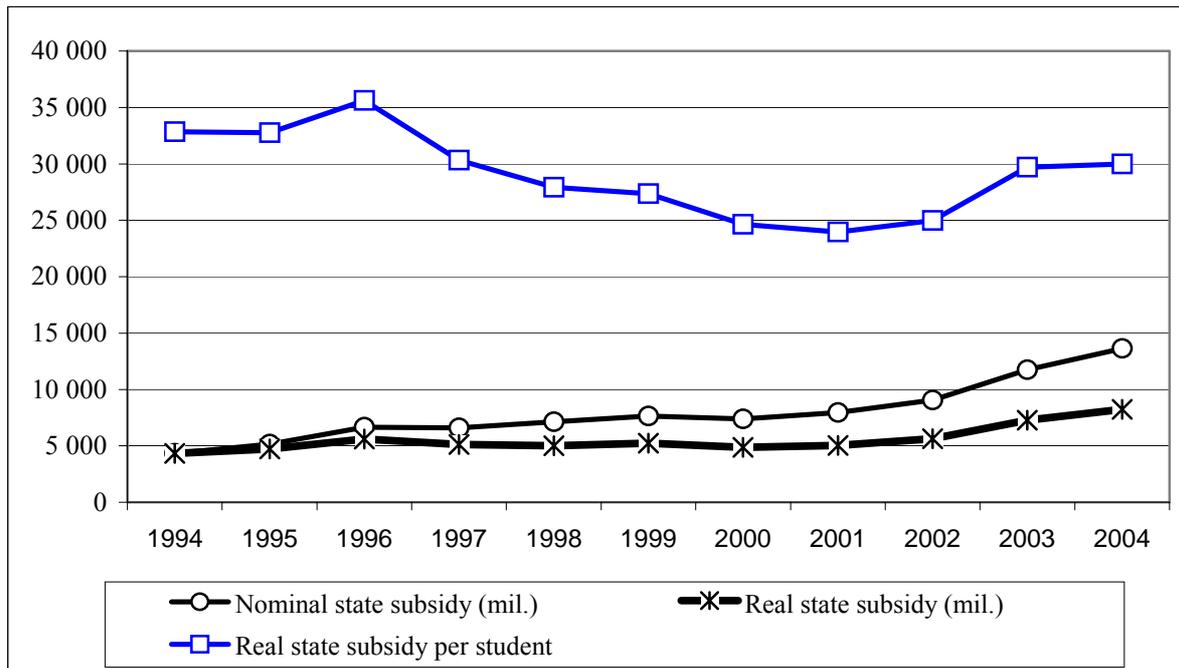
As for the private colleges, the 1998 Act allowed private universities to accredit their study programs and therefore to develop. Although private universities did not receive any government subsidies (this not being explicitly forbidden by the Act), as of the 2000/2001 academic year, there were fourteen private schools with more than two thousand students. Today, there are more than thirty private universities, many with accredited bachelor's and even some master's programs. Although this undoubtedly represents an important step towards further liberalisation and diversification of higher education, the fact cannot be covered that the quality of education provided by Czech private universities is much more diverse than in the case of public universities. The situation is similar in other post-communist countries, as well.

Third stage: growth hindered by financial crisis – profound institutional and funding reforms keep being postponed

Local as well as international statistical data show the long-term and deepening financial crisis in the public sector of tertiary education in the Czech Republic. This crisis prevents the growth of educational opportunities that would enable the proportion of persons attaining tertiary education to gradually reach developed country levels.

Since 1994, when new higher education funding mechanisms were introduced, the number of public university students has been growing (from 132 thousand in 1994 to 274 thousand in 2004). Nominal educational activity subsidies did increase as well over that period (from 4.3 to 13.5 billion, i.e. three times), but inflation grew 1.6 times in the meantime. Thus, the rate of *real* educational activity subsidies (from 4.3 to 8.2 billion) and student number growth were the same. Figure 3 shows that the real government per student subsidies did in fact decrease (from CZK 33 thousand in 1994 to CZK 29 thousand in 2004). These numbers show that from a purely economic point of view (real input/output ratio), the performance of Czech universities increased. There is the concern, however, that this development contributes to the internal indebtedness of universities and jeopardises the quality of educational services provided.

Figure 3: Basic indicators of university financing in the Czech Republic 1994 to 2004



Source: Ministry of Education, Youth and Sport.

International comparisons confirm the considerable budget deficit of the Czech Republic's higher education system. According to the last edition of *Education at a Glance* (2004), OECD countries invest the average of 1.37 % GDP⁶ in their tertiary education systems from both public and private resources, compared to Czech Republic's mere 0.88 % GDP, i.e. approx. two thirds of the average. If we only consider public resources, however, our score compared to other countries is much better. The OECD average amounts to 1.04 %. The Czech Republic invests 0.84 % from public resources, i.e. three fifths of the OECD average. In countries with high share of GDP investment into tertiary education, private resources play a significant role. In the Czech Republic, 0.084 % GDP flows into tertiary education from private resources, the OECD average being 0.341, i.e. almost four times more than here.⁷ Although public resources undoubtedly remain the main source of public university financing in almost all countries, the share of private resources in financing public tertiary education institutions increases all over the world. The Czech Republic lags much further behind in this respect than in public spending.

The average per student expenditure for tertiary education amounts to USD/PPP 5.5 thousand in the Czech Republic. This is the fifth worst position among OECD countries (the OECD average is USD/PPP 10 thousand, the US spend 22 thousand, Sweden 15 thousand, Australia 13 thousand, Great Britain, Denmark, Germany and Ireland 10 thousand, etc.). As the data are recalculated for purchase power parity, the difference between the Czech Republic and developed countries – of about 50 % - can be seen as one of the indicators of the internal indebtedness of Czech universities. Given the situation in 2001, as evidenced by OECD data, the number of students in that year (210 thousand), and nominal subsidies for public universities' educational activities of less than 8 thousand billion, the internal indebtedness caused so far just by lower per student spending represented approx. 8 billion CZK. Since then, educational activities expenditures have increased to 13 billion, while student numbers

⁶ This is unweighted average. The weighted average (taking into account the size of individual countries and, consequently, OECD as a whole) equals 1.8 GDP. The data apply to year 2001.

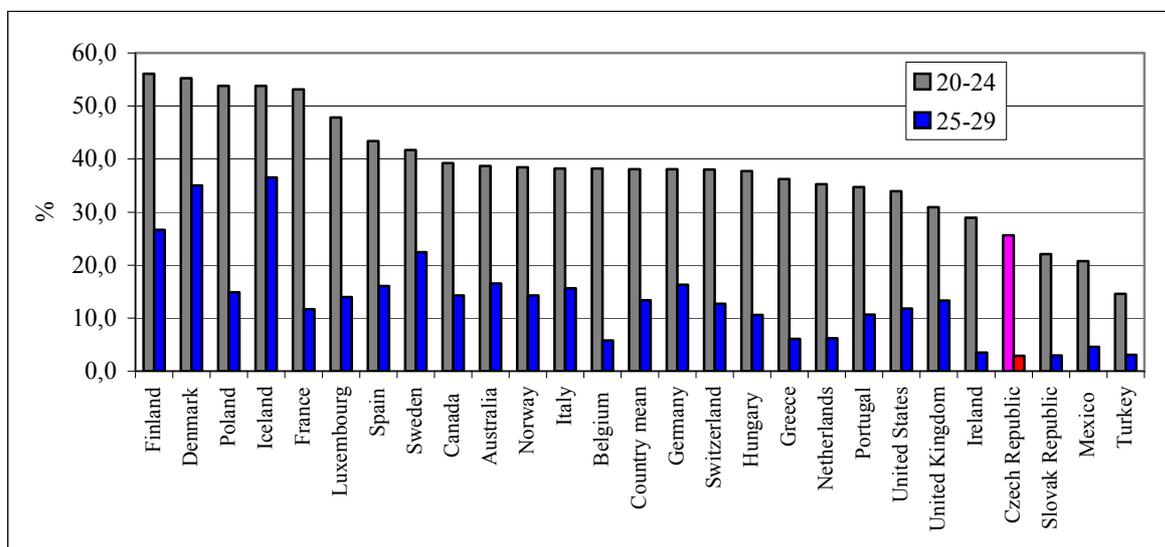
⁷ The difference is much larger for weighed average: the OECD-wide average equals 0.9 % GDP of private resources, representing 50 % total spending (just 11 % total spending for the Czech Republic).

rose to 270 thousand. Therefore, based on this indicator, internal indebtedness of universities has only decreased negligibly.

The second significant public higher education ‘internal debt’ indicator is the extremely low number of tertiary level educational opportunities. This indicator has been the point of conflict for years. MEYS representatives often claim in public debates that the share of young people entering tertiary education is high enough here as it has exceeded 40 percent, bringing us to the OECD average. The recently published MEYS material (Higher Education Reform Strategy in the Czech Republic, 2004) reads: *‘It can be stated that the significant and fast extensive development of tertiary education has finished, although it shall be fading away for another approx. five years, when the number of admitted tertiary education students shall stabilise at approx. 60 % of the relevant population cohort.’* Independent analyses have shown, however, that we belong among countries with the lowest tertiary education participation levels among the relevant age cohorts. With respect to the long-term conflict between the ‘governmental’ and ‘independent’ interpretation of tertiary education participation levels, this ‘deficit’ deserves to be analysed and compared in greater detail.

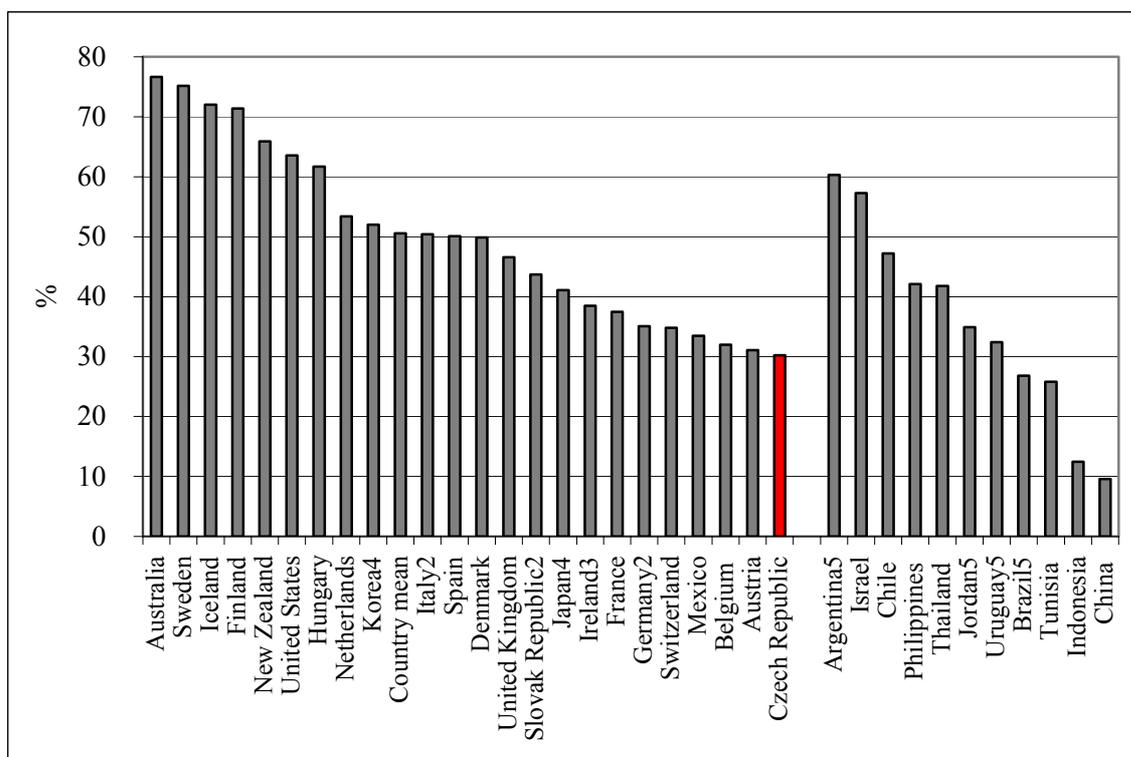
Three different figures from international comparisons published annually by the OECD (Education at a Glance) – the share of students above 20, the net tertiary education participation level and the expected duration of tertiary education – equally show that the Czech Republic’s ranking as to tertiary education participation is among the worst in OECD. Figure 4, showing the shares of people in education of 20 to 24 and 25 to 29 years of age (i.e. persons that prevalently study at universities) shows clearly that while 26 % people between 20 and 24 study here, the OECD average is 38 %, a level most OECD countries exceed. Our position right above Mexico, Turkey and Slovakia as to this hardly questionable indicator certainly represents a matter of concern.

Figure 4: International comparison of the share of people in education between 20 and 29 years of age in OECD countries



Source: Education at a Glance 2004 (OECD).

Figure 5: International comparison of type A tertiary education participation: the totals of shares of those entering tertiary education in the relevant age groups in 2002



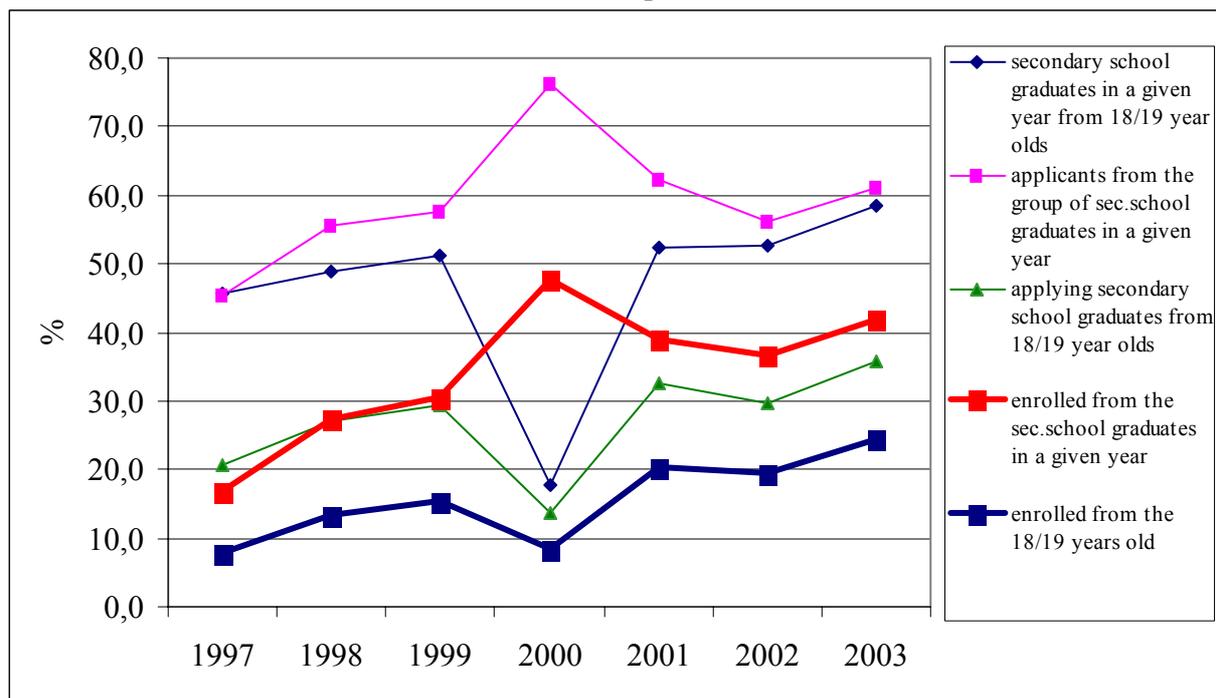
Source: Education at a Glance 2004 (OECD).

The second indicator, net participation in type A tertiary education (i.e. ‘academic’ degree), offers the same picture. Figure 5 shows that with 30 %, we are ranking last among OECD countries where this item is available. However, the fact that we have been left behind by many developing countries, such as Argentina, Chile, the Philippines, Thailand, Jordan and Uruguay, is most disconcerting.

The same conclusion can be drawn from the comparison of the expected duration of tertiary education, an indicator showing the average number of years an individual at the age of 17 may spend at the university under the given circumstances. Again, to avoid the difficulty in comparing different tertiary education systems with different shares of practice-oriented bachelor’s programs, we again focus exclusively on type A (i.e. higher or academic degree). The expected duration of this type of tertiary education in the Czech Republic is 1.5 years, the OECD average being 2.3 years (USA 3.9, Norway and Sweden 3 years, Australia 2.9 years, Portugal, Hungary and Spain 2.4 years, etc.). We again rank among the last OCED countries.

All the above indicators point in one direction: as to the chances to university studies, the Czech Republic is not only deep below the OECD average, but it represents on of the most problematic countries in the respect. The question is what error is made by those who claim that we belong among countries with such a high share of enrolled that it is unnecessary to increase the share of students from relevant age groups and it suffices to focus on qualitative indicators. Therefore, we have analysed data from the Uchazec (Applicant) survey series, the results of which show that the problem may lie in the wrong definition of the original population.

Figure 6: Development of basic indicators characterising secondary to tertiary education transition in the Czech Republic



Source: UIV (Institute for Information on Education).

Understandably, university studies aspirations are at their highest immediately after secondary school completion. Each year of deferral, whatever its cause, decreases the chances for admission. Therefore, it is interesting to look at data mapping the relevant groups at this decisive moment, i.e. immediately after secondary school completion. Figure 6 based on data analysis of the Uchazec survey and other sources shows primarily that the share of secondary school graduates holding the secondary school leaving exam (*maturita*) amounts to 60 %. It further shows that the share of ‘fresh’ *maturita* holders applying to universities fluctuates around 60 %. About 40 % of these candidates recruiting from among fresh *maturita* holders are admitted to universities. This means that less than a fourth of the relevant *age cohort* are admitted to universities, a number corresponding to international comparisons.

Taking the average tertiary education participation in OECD as a basis for the estimate of the second deficit component, we find that to achieve this average, the number of people entering tertiary education would have to increase to 1.6 of the current number. This would incur further increase of subsidies for educational activities by at least another 10 billion a year (with per student subsidies corresponding to the OECD average). Adding the above estimated deficit of 8 billion, the estimated annual deficit amounts to 18 billion. These are rough estimates that cannot replace due calculations based on future trends. They are to show the current scale of the problem the Czech higher education is facing and the costs of its solution. These estimates should also show that a deficit of this size cannot be covered solely from public resources and unless the mechanisms are significantly strengthened to ensure maximum effectiveness of the use of the means invested.

Returns to tertiary education increases, the tertiary education sector fails to adjust to the change

The steeply rising higher education aspirations have *inter alia* been caused by profound changes in economic return of higher education in post-communist countries. J. Večerník (2001) concludes that between 1988 and 1996, the effect of education on individual income has doubled. Whereas in 1988, each year in education meant a 'premium' of 4.4 % salary increase, in 1996, this reached 8.8 %.⁸ This happened despite the income stagnation in areas with a high proportion of university educated employees - health care, education, science and research, etc. Disregarding this factor, the wage returns of one year in education increased from 4% in 1989 to 11% in 1996. This development placed the Czech Republic at the same level as Austria and other West European countries already in 1996. Newer analyses by the same author, using the 2002 Microcensus data (Večerník 2005) show that the trend of strengthening economic return on education has continued, even though along a milder curve. Each year of education was bringing the 'premium' of 9.6 % in 2002 (again after controlling the effects of the length of work experience and sex). As for university education itself, its 'yield' compared to basic education amounted to 45 % in 1988, 76 % in 1996 and 81 % in 2001.⁹

The OECD data also refer to the return of tertiary education. The average earnings of a tertiary educated person in the Czech Republic are currently 1.7 times higher than the earnings of a secondary school graduate; the OECD average ratio is 1.5 (Hungary 1.84, USA 1.8, France 1.69, Germany 1.57, Norway 1.32)¹⁰. Economists and statisticians have been paying a lot of attention to return of higher education recently. Several recent analyses give us the idea of societal as well as individual returns on investment into university education. Several important conclusions can be drawn from analyses by Kateřina Vokáčová (Vokáčová 2005):

1. The difference between social costs of education of a secondary and tertiary school graduate (the graduate of a five-year master's program) return within 9 years due to higher tax and social insurance contributions, while direct costs (the average direct per student subsidy) is paid back by the student as early as in the eighth year after graduation (Vokáčová 2005, pp. 4);
2. Individual investment into higher education (i.e. overall real costs incurred by the student and his family less tuition and loan on interest) return in seven years on the average;
3. The real profitability level of higher education from society's point of view (excluding the impact of higher education on the overall labour productivity) amounts to 4.82 %, whereas the real profitability of individual investment into higher education amounts to 6.87 %, i.e. directly measurable individual profitability of higher education seems to be higher than the society's;¹¹
4. University graduate's cumulative wage levels the secondary school graduate's wage as soon as at the age of 32.

⁸ This is a contribution to the logarithm of gross wage after the test of the length of experience and sex.

⁹ For comparison, premium of secondary education compared to primary: 18 % in 1988, 42 % in 1996, 45 % in 2002.

¹⁰ Education at a Glance, 2004. Paris: OECD. It needs to be born in mind that the growing share of persons with tertiary education decreases the average wage premium for a university diploma. This is why educated people in transforming countries can be relatively better paid than people in more developed countries. The education premium in transforming countries keeps growing with the supply of educated people.

¹¹ These data are valid under certain conditions, namely when the student finances education without a loan or with an interest-free loan, while the same applies to societal profitability (for the conditions of data applicability, see Vokáčová 2005).

The growing tertiary education aspirations caused *inter alia* by the increasing return and the slowing growth of study opportunities contribute to tough competition at tertiary education admission, making the transition from secondary to tertiary level a true nightmare for secondary school graduates and their families. The considerable overpressure at the university admission and the long-term resistance of schools to introduce professionally designed and nationally applied study aptitude tests (not tests of factual knowledge!) combined lead to high and ever-growing social selectivity in tertiary education.

In a situation of high excess demand over the supply of study places, the resistance against the universal application of study aptitude tests has turned out to be one of the obstacles for attaining higher transparency and effectiveness in the admission process. The public opinion poll performed by the Institute of Sociology of the Czech Academy of Sciences in autumn 2003 confirmed the concerns that university admission is in the minds of the public linked to acquaintances and corruption. According to this survey, almost half of the respondents (47 %) agreed with the following statement: *'Without acquaintances and favouritism, a young person has no chance to get admitted to university'*. A survey among first year university students from 2004 showed that 45 % of admitted students believe that acquaintances and corruption played their role in the admission process they had undergone.

As usual, the response by legislators as well as the executive to the above trends has been insufficient. In autumn 2000, an amendment to the Higher Education Act was adopted, representing one of the positive steps. This amendment formed a legislative framework for the speeding up of public universities' transformation to the dual-track system and re-allowed capital investment into private joint ventures and spin-off companies (restrictions were imposed only on property and funds transferred to universities from the government).

The amendment also introduced more stringent rules for students exceeding the standard length of study.¹² In view of continuing political opposition to student financial contributions to covering educational costs (tuition fees), the authors of the amendment aimed to establish a legal framework for the transition to the dual-track system, which some universities were in fact already using. After the amendment took effect (July 1, 2001), students in the so-called life-long learning programmes universities are allowed to charge tuition fees for, can take courses in accredited programmes and accumulate regular credits. Under certain conditions, these may be converted to a regular 'diploma'. This amendment allowed universities to admit students above the quota set each year by the Ministry of Education and to charge them a discretionary tuition fee very close to the amount the school would otherwise get as a government per student subsidy. Although most of public university rectors were against this provision, many universities very quickly began offering new 'life-long learning programmes', which allowed them to admit students above the limits set by government funding and to improve their budgets. Tuition fees charged by universities for such programmes are close to the government per student subsidy in a given programme.¹³

The efforts to implement a more consistent reform of higher education financing culminated in 2002, when - after six months of public and political debate - a Bill on Higher Education Financing, prepared and submitted by Petr Matějů, then a member of the Parliament, was presented to the Czech Parliament. The principal goals were:

1. To open universities to a larger number of students and thus to meet the growing demand for tertiary education.

¹² Those who exceed the standard length of study for more than a year are charged a fee very close to the government annual per student subsidy in the given programme.

¹³ Interestingly, many rectors also lobbied against provisions leading to the faster transition to the dual-track system (claiming it would undermine universities' autonomy) and against opening the space for investment into private companies which, in their eyes, jeopardised many universities by economic bankruptcy.

2. To rationalise the tertiary education demand (to strengthen the economic aspects of decision-making on the subject, length of studies, and school selection).
3. To create a system of loans and financial assistance preventing the rise of new social and economic barriers to tertiary education access following the introduction of tuition fees. The new system was also to eliminate existing barriers, i.e. to improve conditions for students from low-income families.
4. To increase the use of private resources in financing university studies and to help eliminate the existing indebtedness in the sector, one of the causes of the extremely limited capacities and the inadequately low wages of university lecturers.
5. To strengthen economic incentives for universities to improve the quality of education, their awareness of the changing situation at the labour market, and of the actual success of their graduates.

The Bill expected the introduction of tuition fees two years from the Act's entry into force (2003), for newly enrolled students only. Universities were to be allowed to charge different tuition fees within a specified range.¹⁴ Tuition fees for subjects not leading to high earnings (teachers, historians, social workers, etc.) were expected to be nearing the bottom of the range. On the contrary, lucrative subjects (such as law, economy, international trade, etc.) were to be closer to the upper end of the tuition fee range. This strategy was to lead universities to respect the diploma's 'market price' at the labour market and to prevent them from overcharging students. Government subsidies were not to decrease due to the revenues from tuition fees, which were to represent a sufficient income allowing universities to expand facilities to accommodate the growing numbers of students, to increase teachers' salaries, and to launch scholarship programmes.¹⁵

The Bill introduced the option of limited interest rate loans from authorised banks.¹⁶ Loan repayment was proposed to begin once graduates reached the national income average announced every year by the Statistical Office. The instalment amount was set at 10 % of taxable income. Should the person's income drop below the national average (illness, maternity, long-term unemployment, etc.), loan repayment could be suspended.

It was also proposed that should a student be declined a loan by a bank (if, for example, the bank was not convinced that studying a particular programme at a particular school would enable the student to repay the loan), the student should be entitled to tuition fees repayment deferral until his or her income after graduation reached the average national level. The deferred tuition fees would be burdened with an interest rate slightly higher than the bank loan rate (the students were to be encouraged to pay up-front or to get bank loans in order for the current university budgets to increase). The loan interest was proposed to be tax deductible, for individuals as well as future employers, who would be allowed to assume the loans as business costs.

A very important part of the Bill dealt with allowances for students from low-income families. Three categories of allowances were proposed: *board*, *accommodation* and *transportation*. To keep transaction costs as low as possible, the eligibility criteria were

¹⁴ The midpoint of the tuition fee range was set as 25 % average government subsidy for education costs per student. In the first year, the tuition fee was to vary between 1.5 and 0.5 times the midpoint value, the second year the maximum could reach 1.75 times of the midpoint value, from the third year on it could reach double the midpoint, with the same minimum level.

¹⁵ According to the Bill, a minimum of 10 % collected tuition fees were to be allocated to scholarship funds. Scholarship award criteria were to be set by the university management in co-operation with relevant student bodies. The main idea was for scholarships to go to talented students from low-income families.

¹⁶ The market interest rate upper limit was set at a 2.3 times the official discount rate.

proposed to be the same as child benefit granting criteria. The Bill also attempted to introduce tax relief for university students.¹⁷

The Parliament did not pass the Higher Education Financing Bill. Apart from political and ideological reasons, the main arguments against the Bill were:

1. Tuition fees would increase the inequality in access to tertiary education. Loans and deferred tuition payment would not be a solution for lower social strata that, due to higher perceived risk of failure, show stronger hesitance to borrow for education than the upper social strata.
2. Revenues from tuition fees would not strengthen university budgets significantly, and the risk of government subsidy reduction would increase.
3. There are subjects and study programmes with relatively low expected post-graduation wage levels and tuition fees would lead to serious decline of interest therein (history, pedagogy, etc.) or even to the risk of them being closed.

The last attempt so far for higher education financing reform was the Senate Amendment Bill of the Higher Education Act submitted in 2004. The Bill's sponsors (Senators J. Zlatuška and V. Roubíček) proposed to allow university rectors to introduce tuition fees. The fees were to be determined based on 5 % of the average per student amount of the overall non-investment expenditure provided by the ministry from the state budget to public universities for a calendar year. The Act only stipulated the fee ceiling at triple the basic amount (around CZK 8 thousand in 2004). Within this limit, it left the fee amount at the university's discretion with the possibility to stipulate different fee levels for different study programmes. The study-related fees were to represent an income for the public university.

As for the social aspects and instruments facilitating access to higher education, the Act allowed the rector to waive the fee for a student; however, it failed to stipulate any criteria for such a decision. Implicitly, social criteria were expected to play the main role. The Act however failed to include the issue of loans or government social support for students from low-income families. Financial aid to students was left to individual universities. They were obliged by the law to use one third of the fees for a scholarship fund.

The fee would not have exceeded the eight thousand level. According to many surveys, such an amount is not largely problematic even for students from socially weaker strata.¹⁸ The absence of the other two pillars of study financing, i.e. well-designed loans and programs facilitating study decisions in lower-income families, probably represented the main cause of the Act's rejection in the first reading.

Students of tertiary professional schools do pay tuition fees in contrast to students of public universities and this form does not burden or handicap them for the access to education. Tuition fee can be partly or totally waived for socially disadvantaged students and the reason for the waiver has to be documented. Tuition fees make the motivation to study stronger and arguments of tuition fees proponents in case of university students have been unfounded from the perspective of tertiary professional schools.

The Bill further strived to change the current form of financing based on performance criteria from state budget *subsidy* to *contribution*. The authors argued that contributions would remain mandatory state expenditure, like subsidies, but would allow higher flexibility in handling financial resources and more efficient management. This could prevent inefficiencies that

¹⁷ Income not exceeding the taxable income for students was proposed to be exempt from social and health insurance contributions, regardless of the type of contract between the student and the employer. This should have increased the readiness of companies to employ students.

¹⁸ The acceptability of tuition fees of eight thousand crowns was also tested in a survey among first year university students, carried out in 2004 by the Institute of Sociology, results are available at www.stratif.cz

currently limit the effect of government-provided funds the public universities are fundamentally dependent on now.

Further, for the sake of more efficient handling of public university resources, the establishment of a new fund was proposed (operational resources fund), allowing *inter alia* the use of potential profit from commercial activities for the development of activities requiring operational funds there is no suitable subsidy category for. The authors further proposed the exemption from income tax for public universities in order to increase the public universities' motivation to engage in active knowledge and know-how transfer into economically productive environments where universities operate.

The proposal to enable universities to involve their assets in joint ventures engaging in educational, research, development, art or other creative activities was also related to the spill-over of university effects into the economic sphere. The authors argued that the shareholding in subsidiaries expressed in stock represents the safest form of asset investment, preserving the university's ability to effectively control the company's activities. The amendment Bill expected the limits to the right to shareholding in stock to be removed, namely as to company establishment and investment in the form of intellectual property or financial resources from economic activities.

Like the previous attempts to amend the Higher Education Act striving to strengthen the fiscal autonomy of public universities and to limit their dependence on public finance, this proposal was rejected by the Chamber of Deputies in the first reading.

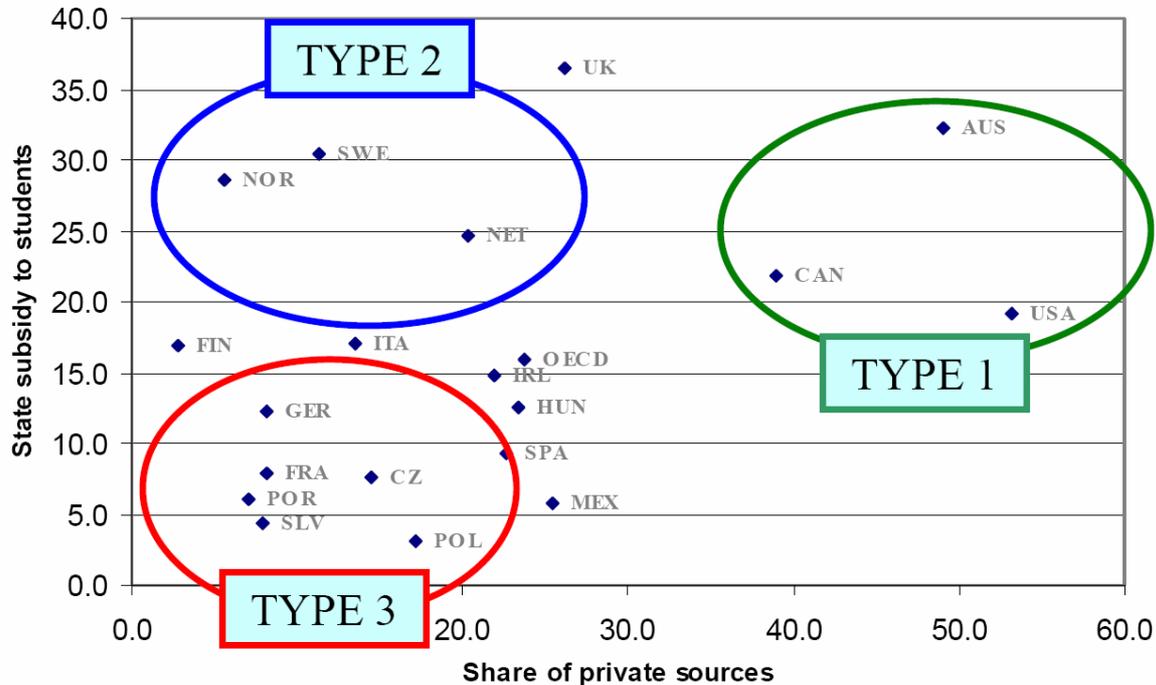
The current financing model represents one of the causes of high inequalities in access to higher education...

The assertion has been used here as one of the main arguments against the introduction of student contribution at public universities that this step would inevitably create further barriers to access to higher education, namely for potential candidates from low-income families. However logical this argument seems at the first sight, it is not entirely correct. In practically all models of university studies financing applied today based on student contribution, there are financial support programs helping the student finance living costs as well as study-related fees. Social aid programs for university students exist also in systems with no student share in study financing (tuition fees). Precisely because the partial transfer of the financial burden to students and their families is usually compensated for by significant financial support to students in the form of scholarships, grants, student allowances or loans, the tertiary education systems with student contribution do not exhibit higher social inequalities in university education access than systems based almost exclusively on public financing of the educational services provided.

As this is a fairly important argument in the discussion on higher education financing, it will be beneficial to support it by comparative analysis results. In the OECD database, there are two indicators to identify basic higher education financing types based on the degree of private financing coming primarily from student contribution and, on the contrary, the extent to which students are provided with financial support in the form of scholarships, student benefits, loan subsidies, etc. Figure 7 shows individual OECD countries in two-dimensional space determined by the two financing indicators:

- a) share of student financial support (grants, loans, scholarships) in the overall tertiary education expenditure;
- b) share of private resources in tertiary education financing.¹⁹

Figure 7: Ratio of the share of private resources in higher education financing and financial support for students in tertiary education



Source: Education at a Glance, 2002 (OECD).

It is obvious from the Figure at the first glance that, there are three significantly different types of countries from the point of view of the two financing parameters:

- a) **type A:** countries where the fairly high share of private resources is compensated for by the strong participation of public resources in student social support programs (Australia, USA, Canada);
- b) **type B:** countries where the government, in addition to covering most of tertiary education costs, contributes significantly to covering the costs of studies by means of social support programs (Scandinavian countries);
- c) **type C:** countries, where the share of private resources coming directly into tertiary education is low and government support in covering study-related costs is weak (apart from most post-communist countries including the Czech Republic, this group also includes Portugal, France, Germany).

The fairly clear-cut division of these three types according to the two university studies financing components allows us to analyse the hypothesis that financial contribution causes

¹⁹ We are aware that tuition fees represent a significant, though not the only private source of higher education financing. Separation of income from tuition fees and other private sources is not possible in the given databases, however.

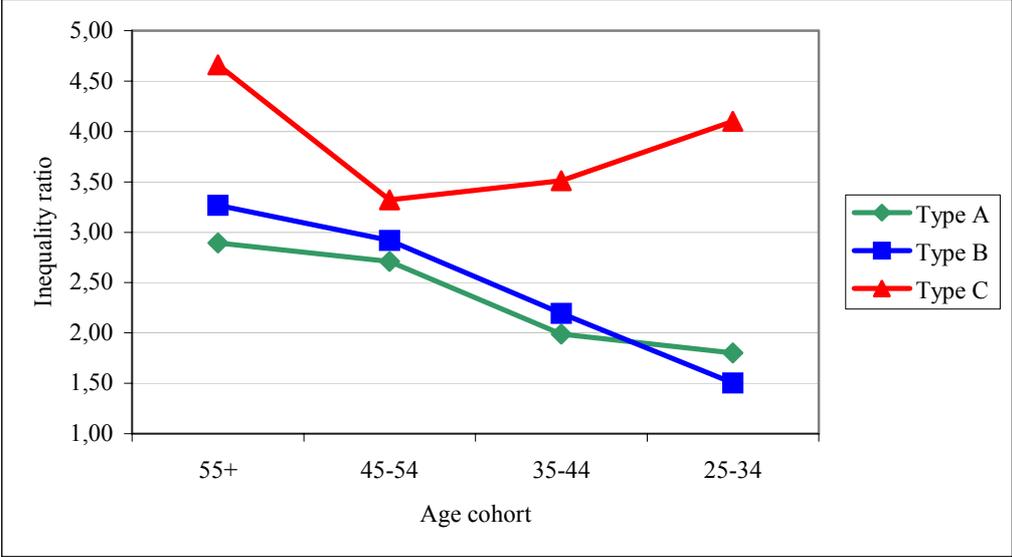
higher social barriers in access to tertiary education. Above all, it seems indubitable that tertiary education systems based on student contributions (type A) can compete with the Scandinavian type systems (type B) as for openness and dynamics, in certain indicators they even seem more dynamic (the change of population share with higher education, the share of students at the age of 20, etc.). On the contrary, traditional European systems (type C), of which the Czech Republic is a typical representative, visibly lag behind the other two types (table 2).

Table 2: Indicators of dynamics and openness of tertiary education systems according to financing model

Indicator	Type A	Type B	Type C	OECD
Expected number of years of tertiary education	3.1	3.2	2.2	2.6
Share of students at the age of 20	36.7	28.5	28.1	30.0
Population between 25 and 34 with type A higher education	26.3	24.3	13.6	18.0
Change of share of population with higher education between 1996 and 2001 (1996=100)	121.2	116.9	112.2	118.3
Share of individuals from manual background having attained higher education	33.9	22.6	8.8	21.7

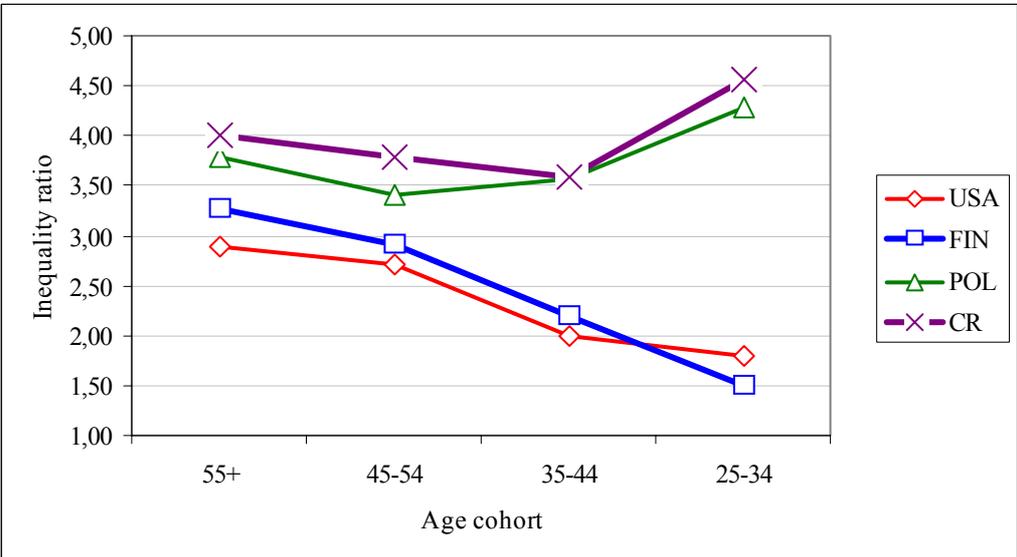
The frequently reiterated assertion that systems based on student contribution (tuition fees) cause higher social barriers in access to higher education than systems fully financed from public resources seem insupportable in the light of the results of the analysis of the inequalities development in chances for higher education attainment. The results included in Figures 8 and 9 show, to the contrary, that inequalities in access to higher education in underfinanced systems with lower student participation in study costs are higher than in systems where students significantly participate in study financing and the government creates student social support programs. Taking the youngest generation, we find that in type A, the chances for the attainment of higher education in an individual from professional background are at most twice as high that the chances of an individual from manual background. In this sense, types A and B do not differ significantly. In type C (where the Czech Republic belongs as well), the level of inequalities was twice as high (the said ration was one to four).

Figure 8: Development of chances of higher education attainment ratio for an individual from professional and manual backgrounds (the item shows how many times higher the chances of higher education attainment are for an individual from professional background than from manual one) - types of countries



Source: SIALS.

Figure 9: Development of chances of higher education attainment ratio for an individual from professional and manual backgrounds (the item shows how many times higher the chances of higher education attainment are for an individual from professional background than from manual one) – selected countries.



Source: SIALS.

These results show that a tertiary education system based on a fairly high level of student contribution to study costs (tuition fees), offering also a wide range of student financial support programs (USA), leads to inequalities comparable with a system where student contribution is negligible (Sweden, Finland). The analysis results show convincingly that student contribution to study costs, if compensated by student financial support programs, is

not a source of inequalities in access to higher education as high as in stagnating systems without student contribution or student support programs (Czech Republic, Poland).

The development of tertiary education in the comparative perspective certainly leads to considerations whether such comparisons are always correct and whether specificities of the given country do not remain hidden that might represent its strengths. As for tertiary education in the Czech Republic, certain elements can surely be found that place us among the leaders in international comparisons. As for the higher education development in its basic parameters (public spending, share of private resources, share of students from a given age group, expenditure per student, etc.), however, the comparison results are disconcerting. Although positive changes have occurred in the past three years as to the share of admitted candidates, which were *inter alia* also related to demographic development, the chances for university admission remain rather low (in 2004, about 60 % candidates were admitted). For the most attractive subjects (law, humanities and social sciences), where the expenditure per student are fairly low, the chances for admission was often below the 1:10 level.

It can be surely claimed that university education is the highest attainable education and therefore logically cannot be provided to all. On the other hand, however, all international comparisons show that the share of young people between 20 and 24 that are still studying is extremely low in the Czech Republic compared to developed countries. We are also at the low end of the scale among OECD countries as for the expected length of tertiary education in seventeen year olds.

It is not just about our position in international comparisons, however. The permanent growth of university education aspirations unmatched by an equally dynamic growth of educational opportunities supply clearly leads to the accumulation of unsatisfied demand, which contributes to the growth of social inequalities in access to higher education. The recently concluded study (Matějů, Řeháková a Simonová, 2003) has shown that the rather high social inequalities in access to university education have further increased after 1989. The analyses of the Maturant survey data of 1998/1999 show that social origin prevented considerably gifted children from studying, as they applied to universities significantly less often than children from higher social strata. If they did apply, however, their chances were lower even in case of comparable or even better study aptitude test results than for candidates from socially better situated families. The role of acquaintances, social networks and other factors the workings of which are scarcely compatible with the principle of equal chances turns out to be too high.

Current system of financing and management of public tertiary education is unsustainable in the long-term perspective

Apart from the lack of financial resources for university studies and related research financing, another major problem of public universities is the bad quality of their management. Many years of experience have shown that university management level cannot improve but due to strong economic pressure from the outside. Many current problems of public universities are rooted in the inadequate behaviour of universities face to face to the development in the nineties.

The growing student numbers and the removal of limits for the numbers of admitted candidates have brought problems with the level of university education financing. Due to the decrease of government per student subsidies in 1996 to 2001, most universities began to fear to exceed the 'admissible increase' of the numbers of newly admitted students. Despite the significant disproportions between the candidates' interest in social sciences and the excessive supply of study places in technical disciplines, universities *de facto* rejected the gradual subject restructuring of the university sector in a direction that would better reflect the real

study demand (and, given the permanently low numbers of unemployed graduates of social science schools, also the demand leading to good future career after university graduation). Internal reserves undoubtedly existed at universities. They wouldn't have sufficed to keep up high quality university education permanently without increased financial resources from the government accompanied by support to the opportunities for the use of private financial resources; however, they could have assisted the restructuring of study places supply and the creation of higher public pressure for the higher level of public university education support. Foreign experience shows that the lack of finances created the best pressure in university systems towards positive changes, if such changes were not artificially suppressed – this chance has, however, not been used to a higher degree in the Czech Republic.

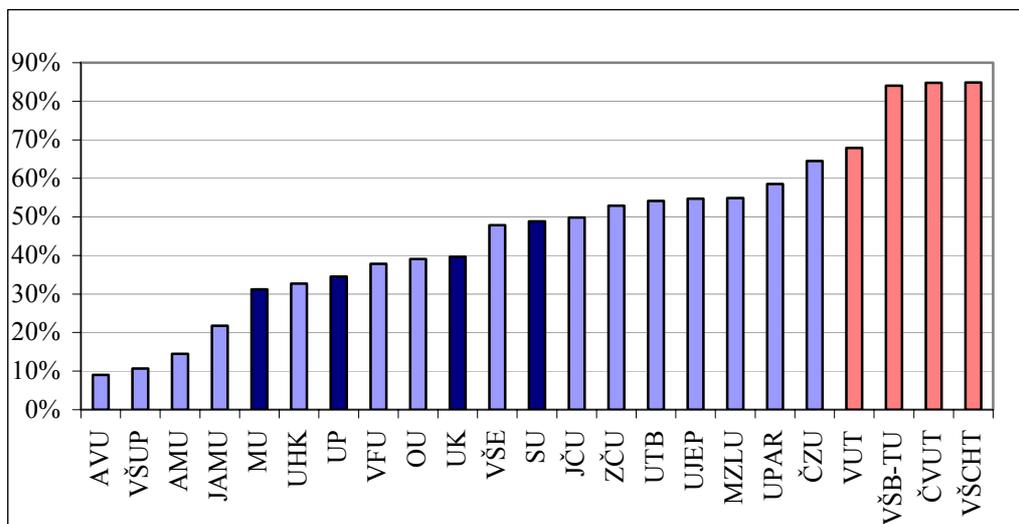
One of the unused public university reserves in the Czech Republic are the long-term low faculty - student ratios. With ratios of the order ten students per one faculty member, universities cannot be operated effectively even in the richest countries. It is not true that high student numbers per teacher automatically lead to the deterioration of the quality of studies. The change of teaching format towards the student's independent study or the involvement of higher year students in contact classes in the form of seminars or classes focusing on better practical mastering of the studied matter (e.g. Teaching Assistants at the American universities) enables more effective involvement of better qualified teachers. The traditional autonomy of individual faculties (schools) at Czech universities has led to the establishment of duplicate units for disciplines 'generically' needed for the studies at various types of schools. The relevant disciplines are technically fragmented among different units with little internal competition, which leads not only to uneconomical use of expert capacities, but also to worse overall expert level. Coherent university-wide institutional policy would enable more effective use of the existing resources so that the increase of student numbers would not jeopardise the quality of studies or the scientific or expert level of university units.

An often quoted ailment of local university units are the low salaries forcing university teachers to take on several jobs. In a survey among university faculty from June 2005, performed by the Institute of Sociology Academy of Sciences of the Czech Republic in cooperation with the Council of Universities (CoU), 35 % respondents stated they had a part time job either at another university (private or public) or elsewhere. Taking into account that the complaints about low salaries are most often heard from schools of humanities and social sciences, which are in highest demand among candidates, it is obvious that these problems are virtually exclusively rooted in the reluctance to release university financing for it to correspond to the study demand, which would enable the attainment of better performance parameters in the subjects in demand (more students with the same number of faculty) and automatically also the improvement of wage conditions (more resources available for wages, enabling sufficient labour capacity to be used within one job instead of spreading it among more employers for the same aggregate wage).

The Figures comparing admission procedure competitiveness, numbers of students per faculty member, the amount of normatively distributed subsidy resources per faculty member and the amount of purpose-determined means allocated for research and development per faculty member (Figures 10, 11 and 12) clearly show the differences between various schools of the same type (traditional universities and typical technical schools are showed separately). There is a significant difference between the narrowly single-subject defined VSCHT with significant proportion of research money, and other technical schools. There is a striking contrast between Masarykova University with high student numbers per faculty member, high study demand among candidates and at the same time high research production per faculty member compared to traditional universities, namely the Charles University. Low student numbers per faculty member at several large universities (namely UK, CVUT and UP) confirm that the often reiterated claim of the extensive university development after 1989 is not true – in many countries (e.g. Poland or Portugal), the relative increases of student

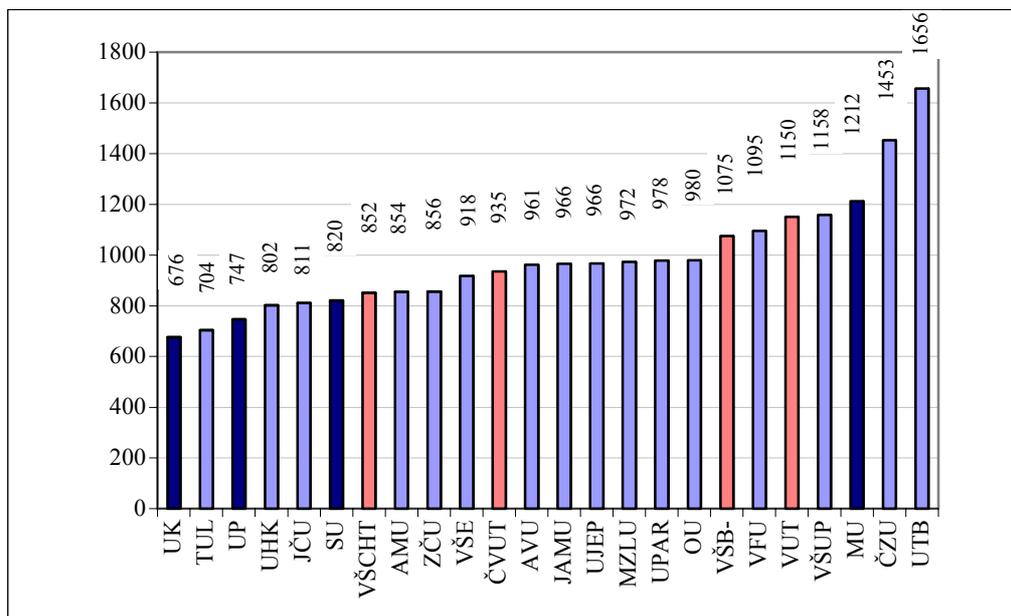
numbers were significantly higher in the same period, and performance ratios (student/teacher ratio plus research performance) at renowned foreign universities (namely in the US) are significantly higher than those at conservative schools in the Czech Republic.

Figure 10. Comparison of study demand and university capacity (percentage admitted from the overall number of candidates taking admission exams in 2004)



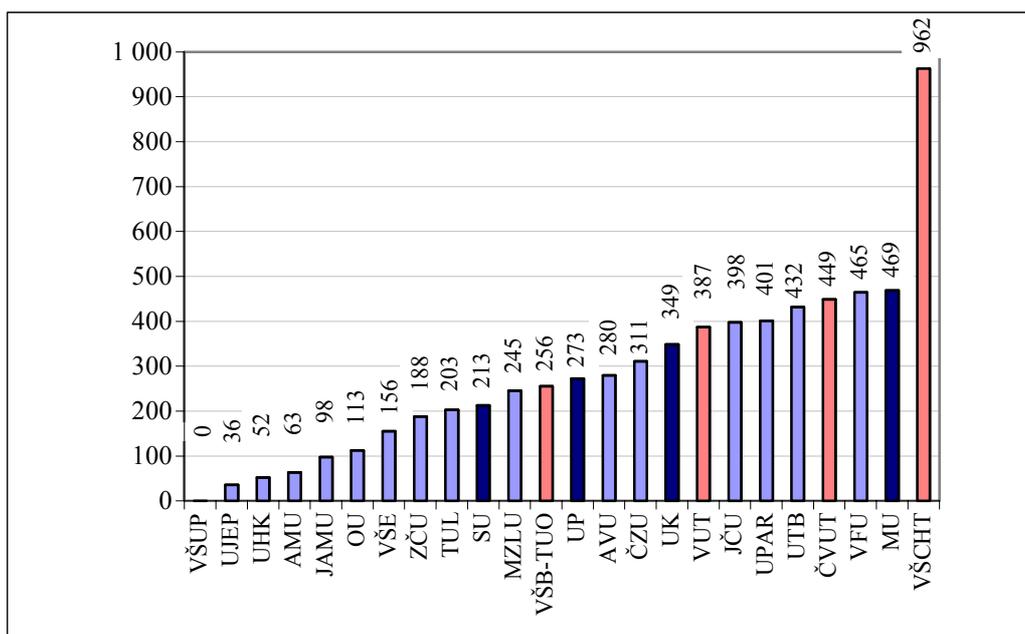
Source: Institute for Information on Education (UIV).

Figure 11. Subsidies for basic and specific research per university faculty member in 2005 (in thousands CZK)



Source: Council of Universities (RVS).

Figure 12. Subsidies for research and development (CEP and specific research) per faculty member, beginning 2005 (thousands CZK)



Source: Council of Universities (RVS).

Disproportions between study demand and the real capacity of individual university types are not dealt with at all by the current financing system. The situation is mainly caused by the endeavour to maintain the *status quo* as long as possible by university representations, who reject any financial measures introducing mutual competition among universities and emphasise the requirement to increase the student normative (which in fact contradicts any significant account of the real study demand in the admission procedure).

Structural problems of the Czech Republic's university system are therefore a more significant problem than the lack of funds in itself. However, this problem has been left unresolved approximately since the second half of the nineties, above all due to the resistance of universities; changes in the ways of financing that would enable better financing of universities in higher demand among candidates are rejected at the level of budgetary rules at the Ministry of Education side as well as in political debates on tuition fees introduction. The system of university financing works against competition among universities. Therefore, an environment cannot be created that would support university development in the desired direction and also reward such development adequately. Only the examples of successful universities shall create sufficient pressure on the others. In the current system, however, rigidity and indifference to changes pay off in the short term.

The significant inefficiencies in the handling of government financial resources for the needs of university education are also caused by the manner of investment resources allocation to universities. For investment, public universities rely virtually exclusively on the purpose-determined finance provided in system subsidies, i.e. program financing. Their allocation is, however, not decided at the university level, but from the ministry. Therefore, investment effectiveness assessment is practically absent from the universities' economic thinking. Conditions are not created for autonomous decision-making on the possible use of financing models based on public-private partnership. Another consequence of the factual removal of financial investment decisions from universities to the ministry is the fact that annual university budgets in fact do not contain investment budgets but only investment disbursement plans, dependent on the ministerial activities not of the university itself. Despite the formal status of public universities as public corporations that do not form part of the

government, real university autonomy or independent economic behaviour can hardly be quoted - namely with regard to the problematic provision for public university funds and the manner of university operational costs financing by means of subsidies with annual accounting (for more, see above the characteristics of the last Senate Higher Education Act Amendment Bill).

In his recent paper Schleicher (Schleicher 2006) pointed out couple of key recommendations for educational policies in European countries. From the perspective of universities the following suggestion is useful to be mentioned in the context of this report: to implement financing and student support policies which mobilize public and private funding in ways that better reflect the social and private benefits of tertiary education.

Public universities as organisations are significantly limited by their internal organisational structure and legal requirements stipulating this institutional structure. The 1998 Higher Education Act did abolish legal subjectivity of individual schools, but it has listed powers delegated to them and their exclusive decision-making. In consequence of that, institutional changes must usually happen quasi-spontaneously from below and the potential establishment of elements of institutional policy mostly evokes high resistance in school representatives. The election of rectors in university academic senates renders a genuine plan for changes an almost non-existent exception within Czech universities.

Rectors' intra-institutional policy is therefore given primarily by the endeavour not to annoy too many school representatives by excessive changes regardless whether such changes would in the long run be beneficial for the institution and thus for its parts as well. In such a situation, the vision of long-term institutional mission is replaced by a more or less explicit instruction not to provoke school representatives against university decisions and not to take steps other universities have not taken yet. This was strikingly visible in the behaviour of university representatives in relation to the transformation of study programs according to the Bologna model, when the disinterest of the ministry and the resentful stance of most universities forced the Parliament to adopt an amendment to the Act to enforce the change. Despite that, legal, pedagogical and medical schools have been avoiding the change successfully, greatly assisted in their conservative positions by the obstructions of the relevant members of the Accreditation Committee.

Obviously, the legal and economic position of public universities does not motivate them to behave responsibly, which is best visible in the above-described principle of rector selection, inherited from the times when universities did not undergo any changes and were largely run by the government. The profile of university academic senate members corresponds rather to that of a trade union organisation than associations of academic faculty responsible for their institution's vision and mission or its competitiveness on the local as well as international scale. The selection of rector candidates is usually not limited by any qualification criteria, the candidates' manifestos are often presented only for the sake of the election process, rather than the factual accountability for their implementation or non-implementation by the end of the term of office. The mandates of the electors do not undergo any too competitive a process, either. The result of the legislative framework of the rector election process and the membership of academic senates is a situation when universities can hardly be managed and developed purposefully by their rectors.

In combination with external economic limitations of the current financing system and the ministry's executive powers, the economic independence of public universities consequently remains just on paper. Internally, this situation is manifested in a non-professional selection of university administrative staff. Commercial companies with comparable turnover and employee numbers would not dare to select their economic directors (university questors) based on such amateur selection, as universities commonly do. Problem is that in the static environment it is more important to be on good terms with the ministries (based on half-

shadow economy) than to support the business environment within the university by the skills of a manager with economic vision.

Externally, the factual incompetence of the Czech Conference of Rectors is visible in the absolute production measured by the attitudes towards necessary changes in the university system as well as in the relative comparison with the activities of the Council of Universities and its expert groups. A good example are the positions of the Czech Conference of Rectors to the results of the assessment of research projects from the turn of 2004/2005, or the absence of systematically justifiable attitudes in this respect. A similar example of reluctance to deal with significant issues, undoubtedly falling within the competences of the Czech Conference of Rectors, is the absence of clearly formulated stance to fundamental ethical issues related to the operation of universities, such as the unresolved PrFUK admission procedure scandal or the habilitation based on a proven plagiarism that was performed without any negative consequences or title revocation at the UP. Not only the school where the procedure was carried out but also the ministry and the Accreditation Committee showed complete disinterest despite the fact that both institutions received motions to act (see Černohorský 2005).

Non-professional appointment of university management leads to the inability to articulate a program of changes. The pitiable state of university management is however a clear evidence of the fact that under the given external university operation conditions, this remains beneficial for most universities (and their academic communities). Real personalities in university management should not excel only as experts in a narrow academic field, if they are not to be just individuals acceptable for conservative majorities in academic senates, they should primarily have a sense of the future and its vision. Their task is to transfer these visions into acts, and to deal with the chances for success or failure of individual reform steps. Higher education in the Czech Republic remains in a great delay behind the world where universities have ceased to be a symbol of academic rigidity, they undergo fast changes and in many cases manage to be the drivers of the development of modern knowledge economy. This trend has unfortunately been avoiding the Czech Republic so far.

References:

- Barr, N. (2004). „Higher Education Funding.“ *Oxford Review of Economic Policy*, Vol. 20, No. 2, pp: 264-283.
- Barr, N. (2001). *The Welfare State as Piggy Bank. Information, Risk, Uncertainty, and the Role of State*. London and New York, Oxford University Press.
- Cerych, L. (2002). “Higher Education Reform in the Czech Republic: A Personal Testimony Regarding the Impact of Foreign Advisers.” *Higher Education in Europe*, Vol. XXVII, Nos. 1–2.
- Černohorský, M. (2005). Vysoké školy 1990-2005, *Aula*, roč. 13, 01/2005, str. 47-55.
- Holda, D., Z. Cermakova, and V. Urbanek (1994). “Changes in the Funding of Higher Education in the Czech Republic.” *European Journal of Education* 29: 75-82.
- Matějů, P.; B. Řeháková and N. Simonová (2003). Transition to University under Communism and after Its Demise. The Role of Socio-economic Background in the Transition between Secondary and Tertiary Education in the Czech Republic 1948–1998. *Czech Sociological Review* (English Edition), Vol. 39 (2003), No. 3, pp. 301-324.
- McMullen, M.S. (2000). „Higher Education Finance Reform in the Czech Republic“.
Educational Policy Analysis Archives, Vol.8 No.6, 2000
(<http://olam.ed.asu.edu/epaa/v8n6.html>).

- McMullen, M.S. and J. Prucha (2000). „The Czech Republic. A Country in Transition Again“. Pp. 47-75 in Matthew S. Mc.Mullen, James E. Mauch and Bob Donnorummo: The Emerging Markets and Higher Education. Development and Sustainability. New York: RoutledgeFalmer.
- OECD 2002 - 2004, Education at a Glance. Paris: OECD.
- Palacios, M.L. (2004). Investing in Human Capital. A Capital Markets Approach to Student Funding. Cambridge, Cambridge University Press.
- Rupnik, J. (1992). “Higher Education Reform Process in Central and Eastern Europe.” *European Journal of Education* 27(½): 145-153.
- Schleicher, A. (2006). *The economics of knowledge: Why education is key for Europe´s success*. The Lisbon Council Policy Brief: The Economics of Knowledge. 13.3. 2006. Available at www: <http://www.lisboncouncil.net>.
- Scott, P. (2002). „Reflections on the Reform of Higher Education in Central and Eastern Europe“. *Higher Education in Europe, Vol. XXVII, Nos. 1–2*.
- Večerník, J. (2001). *Earnings Disparities in the Czech Republic: Evidence of the Past Decade and Cross-National Comparison*. The William Davidson Institute, The University of Michigan Business School, Working Paper No. 373, May 2001 (dostupné také na adrese: <http://eres.bus.umich.edu/web/dvdsn.html>).
- Večerník, J. (2005). *Earnings in the Czech Republic 1988-2002: changing disparities and their structure*. Draft paper of the GDN project "How labor market and earnings affect family income? Disparities in market income and household disposable income in the Czech Republic between 1988 and 2002."
- Vokáčová, K. (2005). Mnohostranná analýza ekonomické efektivity vysokoškolského studia. Diplomová práce. Západočeská univerzita v Plzni.
- Zásady zákona o školním a státní sociální podpoře vysokoškolských studentů. (1993). Komise pro otázky transformace školství Výboru pro vědu, vzdělání, kulturu, mládež a tělovýchovu Poslanecké sněmovny Parlamentu České republiky.