

Equity has become the priority in the education policy agenda again. Key documents of the EU as well as of its member countries stress the importance of access to education from all important aspects – economic rationality and effectiveness, social cohesion and stability of society, personal development and justice. Understanding the role of inequalities in access to higher levels of education is therefore one of main research objectives.

The new Education Policy Centre study *Who is more equal? Access to European tertiary education during last fifty years* (Jan Koucký, Aleš Bartušek and Jan Kovařovic) analyses the development in twenty-three European countries, using data from three rounds of the European Social Survey. The analyses published in the study as well as in the preceding working paper were carried out also for the OECD Thematic Review of Tertiary Education.

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EPC PROJECT ON ACCESS TO EDUCATION

The project *Access to Education: Trends and Patterns in the Czech Republic and the European Perspective* builds on preceding activities of the Education Policy Centre (EPC), as equity issues are one of its main themes. The project, commenced in 2006 and to be concluded at the end of 2008, has three main stages.

The first stage focused on studying available literature and databases. One of its aims was to find out how and to what extent the data from the first two rounds of the European Social Survey (ESS 1-2) can be used for examining and analysing the long-term development of inequities in access to tertiary education, and for elaborating and interpreting indices and models of intergenerational transmission of inequities. The outcomes of the first stage were published in June 2007 as a working paper *Inequality and Access to Tertiary Education: European Countries 1950–2005*.

The second stage concluded by the new study has more ambitious aims and uses updated and new sources – data of the third round of the European Social Survey (ESS-3) made available at the beginning of 2008, together with new outcomes of two international surveys of higher education graduates REFLEX (conducted in 15 countries in 2005/2006) and

CHEERS (conducted in 12 countries in 1998/1999). More extensive data have enabled to update and extend analyses of the first stage and to attempt their deeper interpretation. In order to verify the assumption that in progress from elite to mass and universal systems of tertiary education inequities in access persist, partly being transferred within the system, the analyses of access have been carried out separately for three main levels of tertiary education (those of ISCED 5B, ISCED 5A short, and ISCED 5A long cum ISCED 6 respectively). Also the use of REFLEX data opens further insights into the inner stratification of tertiary education systems in Europe.

At the turn of 2008, the EPC conducted a major graduates survey in the Czech Republic which makes possible to extend the project further. In the third stage, the analysis of the impact of family background will be considerably deepened by introducing new characteristics (such as economic and social situation of the family, the support of parents and teachers, school performance, the level of aspirations and motivation). The final study (to be published at the end of 2008) will focus on explaining the development and causes of inequities in the Czech Republic during the last decades in a Pan-European perspective; in addition, it will contain recommendations for the Czech education policy.



CHARLES UNIVERSITY IN PRAGUE
FACULTY OF EDUCATION
EDUCATION POLICY CENTRE

Who is more equal?

Access to European Tertiary Education
During Last Fifty Years

Analytical study

Jan Koucký, Aleš Bartušek and Jan Kovařovic

Prague, May 2008

HOW TO MEASURE INEQUITIES?

Due to the size of the data set available from ESS (1-3) and the age span of respondents, it is possible to designate six age cohorts defining those who concluded their studies during a certain period of time (that is during one of the six decades: 1950-1960, 1960-1970, 1970-1980, 1980-1990, 1990-2000, 2000-2007). However, the distribution of graduates by age differs across countries, as confirmed by analysing both the OECD database and the outcomes of REFLEX and CHEERS. In those countries (e.g. Nordic countries) where students are older when concluding their studies and their age differs a lot, the age cohorts representing the same period of time are defined by older respondents, are broader and more mutually overlapping; in some other countries (e.g. Belgium, France or the United Kingdom) it is just the opposite. As a result, the designation of age cohorts has to be different for each respective country.

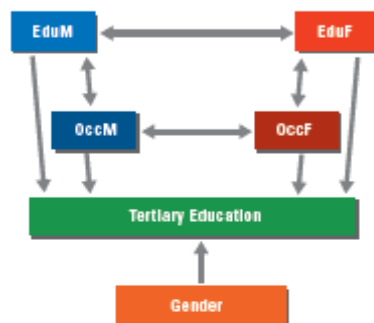
The model used for the analysis of inequality in access to tertiary education in Europe is a logistic regression model with one binary explained (target) variable expressing whether or not a respondent achieved tertiary education (Tertiary). As explaining variables serve the ascriptive factors – occupation of the father (OccF) and of the mother (OccM) when the respondent was 14 years of age, the highest level of education achieved by the father (EduF) and by the mother (EduM), and the respondent's gender (Gender). In this form the model was repeatedly used to analyse six designated age cohorts of respondents in all 23 European countries.

The analyses have yielded a wealth of results. The most important one is that they allowed the EPC to construct one comprehensive index, describing the overall level of inequality of access to tertiary education in Europe – the Inequality Index, derived from the quality of the model indicator. The index assumes values within the <0;100> interval – the higher the index, the higher the inequality in access to tertiary education.

Analyses also allow to determine the relative strength and different course of all four characteristics of parents. The father's

occupation has exerted the strongest influence almost from the beginning of the period under review. The three remaining characteristics are considerably weaker and almost of the same magnitude today, although at the beginning they differed a lot. The father's education was the strongest of all, the mother's education was in a middle position, and both have been decreasing since. The mother's occupation was the weakest one, but the only one that has been steadily increasing.

Analysis of Inequality Conceptual Model



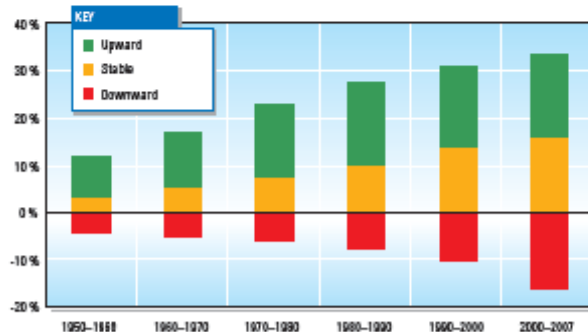
THE EDUCATION LIFT MOVES IN BOTH DIRECTIONS

Tertiary education has become an important factor affecting career and position in modern societies, and trying to attain it has become one of main strategies of intergenerational status transmission. It is important to find, how most young people attain it, and how it is transmitted from one generation to another. Graduates of yesterday become parents of today wishing that their children attain at least the same level of education tomorrow. The previous growth of tertiary education affects its future development.

The expansion of tertiary education started in many European countries about fifty years ago. As a result, the proportion of young people with tertiary education has been constantly and significantly increasing, for example from 12 % in the 1950s more than twice to 23 % in the 1970s. In families where at least one of the parents had attained

tertiary education, it was mostly reproduced in the next generation (intergenerational stability or downward mobility). At the same time, however, the expansion of tertiary education allowed that a majority of new students came from families without this tradition (upward mobility).

Intergeneration mobility Europe 1950-2007



Inequality Index measures the level of inequality in access to tertiary education of different groups of people defined by their gender and education and occupation of their parents.

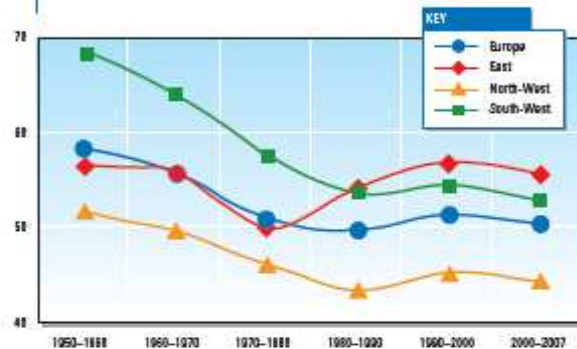
**“For unto every one that hath shall be given, and he shall have abundance: but from him that hath not shall be taken away even that which he hath.”
(Matthew XXV:29)**

Due to the previous dynamic development of tertiary education, the proportion of graduates among those entering parenthood has significantly increased. Moreover, the expansion has been reaching its natural limits and its pace has slowed down. It has been far less than a generation ago, even though the proportion of graduates has increased from 28 % in the 1980s to 33 % at the beginning of this century. As a result, the proportion of families where children of graduate parents have not been able to attain tertiary education has increased. In this decade the downward mobility has surpassed the stability for the first time, thus increasing social tension and frustration.

HIGHER EDUCATION FOR WHOM?

The development of the EPC Inequality Index is already quoted in the OECD synthesis report *Tertiary Education for the Knowledge Society* (2008). Overall the level of inequity of access to tertiary education in Europe has been declining in the last fifty years but at different speeds both across countries and at different periods of time. While the reduction of inequalities was very marked from the 1950s to the 1970s in most European countries and reached its lowest point over the 1980s, inequalities then began to grow in some countries, reaching again the level of the seventies and becoming flat and even slightly decreasing at the turn of the century. The study, however, reveals considerable differences between the countries under review which fall into three more or less distinct groups. The course of inequalities in East European countries (East) is

The Inequality Index
European countries 1950–2007



markedly different – they were close to average values till the 1970s, in the 1980s grew quite steeply till the turn of the century and became flat and slightly decreasing afterwards, distinctly higher than average values and those of other groups of countries. The courses of inequalities of other countries more or less follow the course of average values but considerably differ in magnitude, and can be divided again into two groups: inequalities which are distinctly smaller and their course is constantly flatter (North-West), and those which are moderately greater (South-West).

WHAT IS THE EPC AND HOW TO GET THE STUDY?



CHARLES UNIVERSITY IN PRAGUE
FACULTY OF EDUCATION
EDUCATION POLICY CENTRE

The Education Policy Centre (Středisko vzdělávací politiky) was set up in 1994 as an expert, advisory and research unit within the Faculty of Education, Charles University in Prague. Its main tasks have included analysing and evaluating the development of the Czech education system in an international perspective, setting it in a wider social and economic context and identifying new requirements on human resources. In its research studies the EPC has focused particularly on the relation of education to the economy and the labour market (the transition from school to work, the position of graduates on the labour market, anticipation of qualification and skill needs) and to social cohesion (equity issues, regional disparities).

The new study (*Jan Koucký, Aleš Bartušek and Jan Kovařovic: Who is more equal? Access to European tertiary education during last fifty years. EPC, Prague 2008*) will be available on request addressed to the EPC:

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The expansion of tertiary education considerably helped to reduce inequity during the fifties till the seventies, today its influence has almost vanished.

WHO PROFITS FROM THE EXPANSION?

Further, it has been possible to match the course of the Inequality Index to the quantitative expansion of tertiary education. The table below illustrates the development in individual countries. Using a modification of the typology conceived by Martin Trow, tertiary systems are categorised as elite, when the proportion of graduates in the respective age cohort is lower than 15 %, as mass with the proportion of graduates ranging from 15 % to 30 %, and as universal, where the proportion of graduates exceeds 30 %. The countries are ordered by the proportion of graduates in the population of a given age. The analysis has been carried out for three periods of time (each covering two decades). For each of 23 countries (and also for their unweighted average) and for each of three periods the value of Inequality Index is indicated.

EPC study analyses the development of Inequality in the 23 countries participating in ESS surveys. Relative to the course of the Inequality Index during the six decades of the period 1950–2007, the countries fall into three main groups: EAST – the Czech Republic (CZ), Estonia (EE), Hungary (HU), Poland (PL), Slovakia (SK), Slovenia (SI), Ukraine (UA), NORTH-WEST – Austria (AT), Denmark (DK), Finland (FI), Germany (DE), Ireland (IE), the Netherlands (NL), Norway (NO), Sweden (SE), the United Kingdom (GB) and SOUTH-WEST – Belgium (BE), France (FR), Greece (GR), Luxembourg (LU), Portugal (PT), Spain (ES), Switzerland (CH).

The results confirm the assumptions and go even a bit further by analysing the relationship between the level of quantitative development of higher education and the level of inequality of access to it. There is a certain, although not very strong, link between the proportion of higher education graduates in the population and the index of inequality in access to tertiary education. Their relationship, however, was rapidly changing during the period examined. It was by far the strongest in the first period, roughly in 1950–1970, as the degree of quantitative development in individual countries explained half of the differences between their Inequality Index levels. Already in 1970–1990 the link weakened slightly and since 1990 the relationship has almost disappeared. Not only overall inequities persist to a large degree but they move inside the systems of tertiary education, increasing the difference between sectors, institutions, levels or fields of study. This is confirmed by more detailed analyses carried out separately for different sectors, levels or types of tertiary education.

Expansion and Inequality Index European countries 1950–2007

Period Type	1950–1970		1970–1990		1990–2007		
	Country	Index	Country	Index	Country	Index	
ELITE (less than 15 %)	PT	78					
	ES	69					
	PL	63					
	GR	64					
	CZ	53					
	AT	62					
	LU	67					
	SI	60					
	SK	58					
	HU	56					
	CH	62					
	Europe	57					
	FR	67	PT	63			
UA	50	PL	50				
FI	57	CZ	49				
MASS (15 to 30 %)	EE	52	AT	49			
	SE	41	HU	60			
	DE	50	LU	59			
	GB	38	SK	51			
	BE	58	ES	55			
	IE	53	GR	51	CZ	49	
	NL	57	SI	53	SK	53	
	DK	46	CH	54	DE	50	
	NO	51	DE	45	CH	53	
			Europe	50	HU	66	
			EE	50	PL	59	
			UA	51	AT	43	
			FR	55	LU	49	
		NL	49	PT	53		
		SE	41	GR	54		
UNIVERSAL (over 30 %)			GB	45	SI	50	
			DK	43	NL	46	
			BE	52	GB	47	
			FI	40	Europe	51	
			IE	49	ES	54	
			NO	43	DK	43	
					BE	54	
					NO	46	
					UA	55	
					FR	59	
					FI	42	
					SE	46	
					IE	40	
				EE	61		