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## **Parental Education and Young People's Educational and Labour Market Outcomes: A Comparison across Europe**

Cristina Iannelli

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Editorial Note:

*Cristina Iannelli is Research Fellow in the Centre for Educational Sociology at the University of Edinburgh. Her main research interests include educational transitions and transitions from school to the labour market in comparative perspective, track differentiation in education and social inequalities in educational attainment and occupational prospects of young people. Her work is principally based on quantitative data analysis. The current paper draws on work carried out as part of the project 'Evaluation and Analyses of the LFS 2000 Ad-hoc-module on Transitions from School to Work', co-funded by Eurostat.*

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## Abstract

The existing social stratification studies show that social inequalities in educational and occupational opportunities are still a feature of our societies. This paper aims to study country differences in the extent to which social origin affects young people's educational and occupational outcomes. Twelve countries covering different geographical, economic and social contexts in Europe are analysed in the paper. The data are drawn from the EU LFS 2000 ad hoc module data which collected information on school-to-work transitions. In agreement with other research findings, the results show that parental education still affects young people's educational and early occupational attainment in all countries under examination. However, as expected, there are significant country variations. Thus, the relative advantage of having more educated parents emerges as stronger in the Eastern European countries and weaker in the Nordic European countries. The other Western European countries are in an intermediate position between these two groups of countries, with the Southern European countries more similar to each other. Moreover, in most countries the effect of parental education on their children's occupational status appears to be mediated mainly by education (i.e. indirect effect). This is particularly true in those countries where the association between children's education and parents' education is strongest. The conclusions outline that more universalistic Welfare State policies in the Nordic countries and the increasing social and economic disparities in the Eastern European countries, during the transition period towards a capitalist economy, may have played an important part in the polarisation of these two groups of countries at the two extremes.

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## 1 Introduction

Modern societies have been witness to an unprecedented expansion in educational participation and to an increasing importance of educational qualifications in the job allocation process. Modernisation theorists have regarded these phenomena as leading towards a process of equalisation of opportunities and of social mobility (Kerr, Dunlop, Harbison and Myers, 1960/73; Treiman, 1970; Parsons in Grusky, 1994). According to this view, the increased demand for skilled people has led to an expansion of education and to a stronger link between educational and occupational achievements which leaves no room for the operation of ascriptive factors. Thus, meritocratic criteria in the process of job allocation would prevail over particularistic considerations, based on gender, social class or ethnic groups. The empirical evidence on the effect of social origin on children's educational and occupational outcomes, however, has not supported this optimistic view. Indeed, much comparative research has demonstrated that in many countries the association between social origins and educational and occupational opportunities is strong: people from less advantaged social backgrounds are still at higher risk of dropping out of school early (Shavit and Blossfeld, 1993) and of having worse labour market outcomes (Hannan, Hövels, Van Den Berg and White, 1995; Müller, and Shavit, 1998; McCoy, 2000).

The main focus of this paper is the study of cross-country differences in the effect of social background on young people's educational and occupational outcomes. First, we investigate to what extent social background still affects educational attainment of young people in Europe. Then we focus on the role of education as intermediary factor in the transmission of social advantage. In this latter analysis we try to disentangle the direct and the indirect (*via* education) effect of social background on young people's occupational destinations. One of the main strength of the paper is the use of comparable data for 12 European countries. These data have been collected within the EU LFS (ad hoc module 2000) with the aim of gathering information on school-to-work transition. In particular, the paper uses the information collected in the ad hoc module on young people's educational attainment when they left continuous education, on their first significant job entered after leaving education and on the highest level of education or training successfully completed by father or mother. The number and the range of countries analysed in this paper are extremely rich. This allows us to have a wide picture of social inequalities in young people's educational and early occupational destinations in different geographical but also different economic and social contexts in Europe. There are two Nordic countries - Finland and Sweden; three Northern and Central European countries - Austria, Belgium and France; three Southern European countries - Greece, Italy and Spain; and four Eastern European countries - Hungary, Romania, Slovakia and Slovenia.

In the next section we expose some of the main theoretical explanations of the persistence of social reproduction mechanisms (both at micro and macro levels) in modern societies. Section 3 introduces the main research questions and empirical analyses addressed in the paper. Section 4 describes the data and the methodology used. Sections 5 to 7 present some descriptive data and the results of the empirical analyses. Finally, the main results and some remarks are reviewed in section 8.

## 2 Why are social class differences hard to eliminate?

### 2.1 Micro-level mechanisms of social reproduction

The empirical evidence has shown that modern societies have not yet succeeded in promoting an equalisation of educational and occupational opportunities among people from different social backgrounds. A large part of the sociological literature has analysed the mechanisms through which social advantage can be transmitted. In relation to social inequalities in educational opportunities, Cultural Capital theory (Bourdieu and Passeron, 1977) and Social Capital theory (Coleman, 1988) have stressed the advantage associated to the higher cultural and social resources that children from higher social classes have at their disposal. Pupils from the most advantaged social classes possess language skills, attitudes and societal values which are highly rewarded by the school system. These attributes are transmitted by the family of origin and reinforced through the interaction with friends and members of the communities which the family belongs to. Another set of theories (Haller and Portes, 1973; Sewell and Hauser, 1980) has focused on another way in which social origin can indirectly affect educational attainment, namely the formation of aspirations. Pupils from higher social classes not only have better opportunities to develop their cognitive skills but are also encouraged by parents and teachers to continue education, obtain higher grades and form higher aspirations for their future. Conversely, children from lower social classes live in a less favourable environment, are encouraged less by their parents and teachers, gain lower grades and develop lower aspirations. Because educational aspirations are an important factor in explaining educational achievement, social differences in aspirations lead to social differences in educational attainment. In a different perspective Rational Choice theorists explain diversities in individuals' educational aspirations as the result of a rational evaluation of the costs and benefits which each social class attaches to various educational outcomes (Boudon, 1974; Gambetta, 1987; Breen and Goldthorpe, 1997). Children from higher social classes have more economic resources and more motivation to acquire higher educational levels. They aim to maintain their social position of origin and the possession of a university degree is an important resource to avoid the risk of downward mobility. In this sense they have more to lose from not reaching the higher educational levels than children from less advantaged social classes. Moreover, due to their large availability of economic resources, the costs associated with a long educational career are lower for them than for the other pupils.

The acquisition of better educational credentials by children from more advantaged social classes ultimately results in a clear advantage when they enter the labour market. As stated by Müller and Shavit, "education is a crucial intervening link between the social background of individuals and their later class destination" (1998, p.1), and this may reinforce social inequalities in occupational destinations. Within a non-industrialised society, family of origin and direct inheritance determine occupational allocation (Grusky, 1983). Thus, conditions of birth are very important factors in determining future productive roles. Direct family transmission of social advantage - through parental social networks, economic support and family inheritance - may still emerge to be significant. However, nowadays the indirect family transmission – through the cultural and economic support given

for the acquisition of higher educational qualifications – is very likely to be the most effective way to ensure future good job opportunities for the offspring.<sup>1</sup> This means that, if the unequal order of social groups' access to credentials remains stable over time, the opportunities for social mobility of young people with lower social backgrounds cannot increase (Collins, 1979).

## 2.2 The importance of macro-level contexts

Institutional factors may play an important role in weakening (but also reinforcing) the association between social background and young people's educational attainment. According to Shavit and Blossfeld (1996) an equalisation in cultural and economic resources is a prerequisite to achieving equality of educational opportunities among different social classes (pp.241-242). They base their assertion on the empirical evidence that emerged in the studies carried out by Jonsson in Sweden (1993) and De Graaf and Ganzeboom (1993) in the Netherlands (which were parts of the same international comparative project). In Sweden and the Netherlands the association between social origins and educational transitions (that is transitions from primary to secondary and from secondary to tertiary education) was found to have declined over time. The explanation given was that the equalisation of socio-economic conditions, probably due to a very comprehensive welfare state characterising these two countries, had brought about an equalisation of educational opportunities. On the contrary, within the same comparative study (Shavit and Blossfeld, 1993), the results from the other 11 countries - which included Western and non-Western capitalist countries, formerly socialist Western countries and Israel - showed a persistence in the educational selection which favoured children of privileged social origins (p.21).

The expansion of education may be another institutional factor operating in favour of an equalisation of educational opportunities. The reason linked to this belief is simple: if proportions of people entering the education system increase overall more people from less advantaged social backgrounds are likely to enter too. However, expansion of education does not always bring about a reduction in social inequality in educational opportunities. According to Raftery and Hout (1993), in order for an equalisation process happening the participation rates at one level should reach saturation (in the sense that they are 100%) for the most advantaged social classes. In this case a further expansion of education is associated with a real decline in the effect of social origins on equality of opportunities. If this condition is not satisfied, children from advantaged social classes will continue to be substantially advantaged in the chances of going on in education when compared with children from other social classes (Raftery and Hout, 1993; Heath, 2000). Indeed, the reforms aimed at opening up the higher levels of education to students from different educational and social backgrounds often did not bring the expected equalising effect.<sup>2</sup> This seems to suggest that more active policies are needed

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<sup>1</sup> This is because, as suggested by the modernisation theories, modern economies heavily (though not exclusively) rely on educational credentials in the job allocation process.

<sup>2</sup> For example the 1960s reforms in Italy, which aimed to give to all students (irrespective of their social and academic background) the opportunity to enter the university system, has not produced the foreseen equalisation effect. This is because guaranteeing access to university has not been a sufficient factor to guarantee equal opportunity of success. Thus, despite the growing number of students entering the university system, the percentage of graduates has remained particularly low, especially if compared with other OECD countries.



specifically aimed at removing barriers and increasing opportunities for children from lower social classes.

The Eastern European countries under the socialist regimes experienced active discriminatory policies in favour of working class children. In the 1950s, policies were introduced which regulated students' selection into secondary and tertiary education: they established strict quotas which ensured that certain proportions of all students admitted to schools and universities must have come from a working class background (Ganzeboom and Nieuwbeerta, 1999; Robert and Bukodi, 2000). These educational policies, together with the abolition of large-scale private ownership and the rights to inherit several types of private goods, were aimed at breaking the transmission of social advantage between generations. Some empirical findings show that these egalitarian educational policies were not successful and in the Eastern European countries, as well as in the Western European countries, the effect of social background on educational attainment did not substantially decrease over time (Mateju, 1993; Szelényi and Aschffenburg, 1993; Heyns and Bielecki, 1993; Ganzeboom and Nieuwbeerta, 1999).<sup>3</sup> In these countries the cultural resources, more than the economic resources, of the family of origin seemed to matter most in the transmission of social advantage (Ganzeboom, De Graaf and Robert, 1990; Mateju, 1990). This may have changed after the fall of the socialist regimes since income inequalities in these countries have been growing. However, during the period of economic transformation towards a capitalist economy, educational inequalities in Eastern European countries have increased (Micklewright, 1999).<sup>4</sup>

It is clear that social inequalities in educational attainment are difficult to eliminate and that this in turn has consequences on the reproduction of inequalities between generations. In this paper we try to define the current situation of social inequalities in young people's educational and occupational outcomes and to assess the degree of similarities and differences across European countries.

### 3 Research questions

The present work will try to answer the following research questions:

*Do European countries vary in the extent to which social background affects young people's educational and labour market outcomes?*

*Does social origin directly affect young people's labour market entry? Or is the effect of social origin on young people's destinations mediated mainly by education in all countries under examination?*

*Is it possible to discern patterns (similarities or regularities) across countries in the role played by social origin on young people's destinations?*

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<sup>3</sup> On the contrary in China some equalising effect of similar policies has been found (Deng and Treiman, 1997).

<sup>4</sup> Among the reasons for these growing educational inequalities, there are the widening gap between households' income and the increase in the direct costs of education due to the reduction of public expenditures (e.g. introduction of tuition fees and the abolition of free textbooks; Micklewright, 1999).

As already pointed out, the sociological literature overall indicates that social inequalities are resistant to changes. Thus, we expect that the effect of social background (here measured by parents' education) on young people's educational and occupational outcomes is significant in all countries under examination. However, since cultural and economic disparities present in society and the operation of the institutional factors (education and labour market characteristics and policy decisions) vary across countries, we expect to find significant country variations in the extent to which family of origin affects children's outcomes. There may be a higher level of similarities among the countries which are part of similar geographical as well as economic and social contexts. However, since each country has its own specificities we prefer to avoid grouping the countries in any predetermined manner and to analyse them separately from each other. This makes it possible to explore differences not only across but also within the various areas of Europe.

The empirical analyses start examining patterns of intergenerational (im)mobility in education, that is patterns of stability of mobility between parents and children in the level of education achieved. Secondly, they focus on the effect of social background differences in young people's educational outcomes across countries. Two outcomes will be analysed: early school leaving and tertiary graduation. Finally, the paper analyses cross-country variations among young people with different social backgrounds in occupational destinations (measured by the occupational status of first significant job).

## 4 Data and definitions

As mentioned in the introduction this paper takes advantage of the availability of new data collected within the EU Labour Force Survey 2000 (ad hoc module). These data provide some retrospective longitudinal information on the transition from school-to-work (e.g. educational attainment when leaving continuous education and first significant job entered after leaving education) of young people aged 15-35 who left education for the first time in the last 10 years.<sup>5</sup> The data were collected in 20 European countries, including 6 Eastern European countries. This paper includes only data from the countries in which information on social background (i.e. parents' education) has been collected and in which a sufficient degree of comparability has been established (see Iannelli, 2001).

In the collection of data within the EU Labour Force Survey 2000 ad hoc module a very extensive definition was proposed by Eurostat for identifying the time of leaving continuous education. "Leaving continuous education" should have included leaving from both education and training (with at least 10% of the total training in the educational/training institution), leaving from full-time or part-time courses and from vocational and general courses.<sup>6</sup> However, a few countries - Hungary, Italy,<sup>7</sup>

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<sup>5</sup> Finland and Sweden (but also Luxembourg, the Netherlands and UK, which are not included in this paper) chose a shorter time period, 5 years, as the time span between leaving education and the time of the survey.

<sup>6</sup> Interruptions of study lasting less than 1 year are not considered as "leaving continuous education".

<sup>7</sup> Regional vocational courses (which may have a component of training) are included.

Romania<sup>8</sup> and Slovakia – have adopted a more restricted definition which considers only leavers from the formal education system.

“First significant job” is defined as a job started after leaving continuous education, with a duration of a minimum of 6 months, with a minimum of 20 hrs per week and it excludes casual work or training schemes. With the exception of Belgium, all countries have considered as first significant jobs also those jobs which started before leaving continuous education and went on after leaving education.

The data are analysed using both descriptive statistics and the results of logistic and OLS estimations. These latter analyses are aimed at measuring the significance of the effect of parental education on young people’s educational and labour market outcomes and of cross-country differences in the relative advantages associated with different social backgrounds. Dummy variables are used to measure the effect of gender and educational attainment of respondents and parents. Three levels of educational attainment are considered: lower-secondary (ISCED 1-2), upper-secondary/post-secondary (ISCED 3-4) and tertiary education (ISCED 5-6). Young people’s occupational status is measured according to the International Socio-Economic Index of Occupational Status (ISEI), with a range of 16 to 90, with the highest value attributed to the highest occupational status ( Ganzeboom, De Graaf and Treiman, 1992).

## 5 Some descriptive statistics

Table 1 presents means and standard deviations of the main characteristics of young people who left continuous education in each country under examination. There are large country variations in the educational attainment achieved by young people when leaving continuous education.<sup>9</sup> Italy, Romania and Spain show the highest percentages of young people leaving continuous education with only compulsory schooling or less (ISCED 1-2). In contrast, in Austria, Belgium, Finland, Greece, Hungary, Slovenia, Slovakia and Sweden the rates of young people leaving with only compulsory schooling or less are low (below 20%). In most countries more than half of the young population has left continuous education with a diploma from upper-secondary or post upper-secondary (non tertiary) education (ISCED 3-4). At tertiary level, Austria, Hungary, Italy, Romania and Slovakia are characterised by low rates of graduation, between 10 and 15 per cent. The countries with the highest percentages of tertiary graduates are Belgium, Finland, France and Spain.

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<sup>8</sup> Initial training is part of the education system.

<sup>9</sup> In France the highest level of education refers to both successfully and unsuccessfully completed education when young people left continuous education. However, the data have been corrected in the cases in which young people have declared that they have a lower educational attainment at present than at the time of leaving continuous education.

**Table 1: Mean (and in parentheses standard deviation) of the main characteristics of education leavers**

	AT	BE	ES	FI	FR	GR	HU	IT	RO	SE	SI	SK
Total Number of cases	4632	2930	14909	3576	19444	7654	8614	17331	4693	1872	1750	3872
Female	0.48 (0.49)	0.48 (0.49)	0.47 (0.49)	0.49 (0.50)	0.50 (0.49)	0.52 (0.49)	0.49 (0.49)	0.48 (0.49)	0.46 (0.49)	0.51 (0.49)	0.47 (0.49)	0.50 (0.50)
<i>Highest educational attainment when leaving continuous education/training</i>												
Lower-secondary or less	0.15 (0.36)	0.17 (0.37)	0.35 (0.48)	0.12 (0.32)	0.20 (0.40)	0.15 (0.36)	0.15 (0.35)	0.29 (0.45)	0.27 (0.45)	0.14 (0.35)	0.08 (0.27)	0.04 (0.19)
Upper-secondary	0.74 (0.44)	0.42 (0.49)	0.22 (0.41)	0.56 (0.50)	0.42 (0.49)	0.58 (0.49)	0.70 (0.46)	0.56 (0.49)	0.63 (0.48)	0.62 (0.49)	0.70 (0.46)	0.86 (0.34)
Tertiary	0.11 (0.31)	0.41 (0.49)	0.43 (0.49)	0.32 (0.47)	0.37 (0.48)	0.27 (0.44)	0.15 (0.35)	0.14 (0.35)	0.10 (0.30)	0.24 (0.43)	0.22 (0.41)	0.10 (0.30)
<i>Parents' highest educational attainment</i>												
Lower-secondary or less	0.27 (0.44)	0.45 (0.50)	0.80 (0.40)	0.21 (0.41)	0.51 (0.50)	0.66 (0.47)	0.26 (0.44)	0.68 (0.46)	0.44 (0.50)	0.26 (0.44)	0.33 (0.47)	0.16 (0.37)
Upper-secondary	0.54 (0.50)	0.29 (0.45)	0.10 (0.30)	0.42 (0.49)	0.34 (0.47)	0.25 (0.43)	0.61 (0.49)	0.26 (0.44)	0.50 (0.50)	0.37 (0.48)	0.51 (0.50)	0.76 (0.42)
Tertiary	0.19 (0.39)	0.26 (0.44)	0.10 (0.30)	0.36 (0.48)	0.15 (0.36)	0.09 (0.28)	0.13 (0.33)	0.06 (0.23)	0.06 (0.23)	0.36 (0.48)	0.16 (0.36)	0.08 (0.27)
<i>Experience of first significant job</i>												
Had a first significant job	0.75 (0.43)	0.86 (0.34)	0.68 (0.47)	0.66 (0.47)	0.80 (0.40)	0.71 (0.45)	0.84 (0.37)	0.71 (0.45)	0.48 (0.50)	0.84 (0.37)	0.83 (0.37)	0.67 (0.47)
Average occupational status of first significant job (ISEI)	43.2 (14.4)	45.2 (16.2)	41.8 (16.5)	43.7 (16.7)	43.2 (14.5)	44.3 (15.2)	41.5 (14.2)	43.6 (14.5)	40.7 (14.7)	43.7 (16.1)	44.5 (15.3)	40.7 (13.7)

The distribution of parents' highest educational attainment also shows very large country differences. The most striking difference is in the percentages of parents with low levels of education (ISCED1-2). These percentages are particularly high in the countries of Southern Europe (80% in Spain, 68% in Italy and 66% in Greece) and comparably low in Slovakia, Finland, Hungary, Sweden and Austria (below 30%). If compared with the data on children's educational attainment these data point out the remarkable improvement that younger generation in Southern European countries have made in their educational attainment. Overall, in all examined countries, the percentages of young people with at least upper-secondary education are higher than the percentages of parents with the same level of education.<sup>10</sup>

Looking at the occupational outcomes of young people who have recently left education or training, it is clear that their labour market integration varies largely among different countries. Thus, there are countries in which around two-thirds of the education leavers have experienced a first significant job (the Southern European countries, Finland and Slovakia). Romania shows the most negative figure: slightly less than half of its education leavers have entered a first significant job. These proportions are higher in all the remaining countries (ranging from 0.75 in Austria to 0.86 in Belgium). Among those who have acquired a first significant job, overall average occupational status of young people does not differ largely among the countries under examination (between 41 and 45 points in the ISEI classification).

## **6 Social origin and young people's educational outcomes**

### **6.1 Intergenerational educational mobility**

The absolute rates of mobility or stability between parents' and children's educational attainment presented in table 2 show that in 5 countries (Belgium, France, Greece, Italy and Spain) upward mobility, that is children having increased their educational level compared with their parents, is more prevalent (or equally possible in the case of Italy) than stability (that is children having reached the same level of education of their parents). In all the other countries young people have mainly achieved the same levels of education as their parents. Moreover, in all countries, downward mobility is restricted to a limited proportion of young people.<sup>11</sup> Gender differences in the rates of mobility between parents' and children's educational attainment are quite remarkable: in most countries the chances of upward inter-generational educational mobility are significantly higher for women than for men (with the exception of Austria, Romania and Slovakia).

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<sup>10</sup> There is only one surprising outcome: in three countries, Austria, Finland and Sweden, the percentage of tertiary graduates is higher among parents than among children. This may be due to the fact that we are referring to the first leaving of education for children and the highest educational attainment for parents at the time of the interview (except for Austria): in these countries returning to education after a break may be more frequent than in other countries and this may partly explain the higher percentages of tertiary graduates among parents. In Austria the question in the ad hoc module asked for the highest educational level of parents when respondents were 15 years old.

**Table 2: Absolute rates of stability, upward and downward mobility between young people's educational attainment and their parents' educational attainment (percentages)**

	Stability			Upward mobility			Downward mobility		
	Total	Female	Male	Total	Female	Male	Total	Female	Male
Austria	52	52	52	26	26	25	22	22	22
Belgium	43	40	46	46	51	41	11	9	13
Finland	40	40	40	31	34	27	29	26	33
France	40	38	43	49	53	45	10	9	13
Greece	33	30	36	60	63	57	6	6	7
Hungary	63	63	62	25	26	24	12	11	14
Italy	46	43	47	46	49	42	8	8	10
Romania	62	62	63	29	30	28	9	8	9
Sweden	43	42	42	29	32	24	28	26	34
Slovenia	48	43	51	39	46	32	13	10	17
Slovakia	75	75	74	19	19	19	6	6	7
Spain	42	37	47	53	59	46	5	4	7

Note: some rows do not exactly sum to 100% because the percentages have been rounded to the nearest whole figure.

In the following sections we measure the effect of parental education on young people's educational attainment analysing two possible outcomes: early school leaving (at ISCED 1-2) and tertiary graduation (ISCED 5-6). These analyses are aimed at studying cross-country differences in the strength of the association between social origin and young people's chances of leaving education with only compulsory education or less and of graduating from tertiary education

## 6.2 Early school leaving

Table 3 shows the percentages of early leavers among parents with different educational attainments (outflow percentages). In all countries, with the exception of Finland, the percentages of young people with low educated parents leaving education at an earlier stage are much higher than the percentages of young people who have more educated parents. In 7 of the 12 countries under examination (Belgium, Spain, Finland, France, Greece, Italy and Slovenia) among young people with the low educated parents (ISCED 1-2) women are significantly less likely than men to leave education at lower secondary level. In the remaining countries women's chances of leaving education early do not significantly differ from those of men.

<sup>11</sup> The only exceptions are Austria, Finland and Sweden due to the high percentages of parents who have achieved a tertiary qualification compared to their children.

**Table 3: Percentages leaving education early (ISCED 1-2) by parents' highest educational attainment (percentages)**

	Parents' highest educational attainment								
	ISCED 1-2			ISCED 3-4			ISCED 5-6		
	Total	Female	Male	Total	Female	Male	Total	Female	Male
Austria	24	26	22	13	14	12	10	8	12
Belgium	26	20	32	12	10	14	3	3	3
Finland	13	10	16	15	13	17	8	7	8
France	26	24	29	17	15	19	6	5	7
Greece	20	16	24	8	5	10	6	.	(9)
Hungary	33	35	32	9	9	10	3	.	(4)
Italy	38	34	42	19	15	22	11	10	12
Romania	47	47	47	14	14	14	.	.	.
Sweden	18	18	19	12	11	13	10	.	13
Slovenia	10	(7)	14	8	(6)	9	.	.	.
Slovakia	14	14	15	2	2	2	.	.	.
Spain	40	33	47	21	14	27	11	8	14

The results of the binomial logit estimation presented in table 4, model 1, show that, controlling for the effect of gender and parents' education, the chances of young people dropping out at lower-secondary level is highest in Spain (the reference category), Italy and Romania and lowest in Greece, Slovenia and Slovakia. In all countries there are clear differences among young people from different social backgrounds but the relative advantage of having more educated parents varies significantly across-countries (model 2). Thus, the relative advantage of having parents with upper-secondary or tertiary education in reducing the chances of early leaving is strongest in the Eastern European countries (with the exception of Slovenia) and smallest in the Nordic countries (Sweden and Finland). The Southern European countries (Spain, Italy and Greece) do not differ significantly from each other and have an intermediate position with respect to the size of the effects of parental education on the children's risk of early dropout. In Austria and France inequalities by parental education are also relatively close to this intermediate group, while in Belgium inequalities seem to be rather higher. These results are also confirmed when controlling for country differences in the effect of gender on young people's chances of early school leaving (that is, including the interaction effects between gender and country in addition to the effects already contained in model 2; results not shown).

**Table 4: Binomial logit estimations of the chances of dropping out at lower-secondary level (or earlier) and of graduating from tertiary education**

	Dropping-out at lower-secondary level/Continuing studying		Graduating at tertiary level/dropping out earlier	
	Model 1	Model 2	Model 1	Model 2
Intercept	-0.22***	-0.23***	-0.70***	-0.70***
Female	-0.35***	-0.35***	0.40***	0.41***
<i>Parents' education (ref. Lower-secondary education or less)</i>				
Upper-secondary education	-0.97***	-0.92***	0.49***	0.57***
Tertiary education	-1.71***	-1.65***	1.77***	1.62***
<i>Country (ref. Spain)</i>				
Austria	-0.59***	-0.74***	-2.33***	-2.07***
Belgium	-0.69***	-0.63***	-0.46***	-0.69***
Finland	-0.72***	-1.49***	-1.20***	-0.24**
France	-0.51***	-0.61***	-0.46***	-0.39***
Greece	-1.00***	-0.98***	-0.87***	-0.82***
Hungary	-0.63***	-0.28***	-1.90***	-3.00***
Italy	-0.08***	-0.08**	-1.93***	-2.20***
Romania	-0.05	0.27***	-2.13***	-2.97***
Sweden	-0.66***	-1.06***	-1.52***	-1.00***
Slovenia	-1.43***	-1.73***	-1.37***	-1.02***
Slovakia	-2.05***	-1.39***	-2.31***	-2.32***
<i>Country*parents' education</i>				
Austria*upper-secondary		0.13		-0.21
Austria*tertiary		0.59***		-0.39*
Belgium*upper-secondary		-0.02		0.34**
Belgium*tertiary		-0.74**		0.47***
Finland*upper-secondary		1.08***		-0.78***
Finland*tertiary		1.06***		-1.45***
France*upper-secondary		0.34***		-0.29***
France*tertiary		-0.12		0.16*
Greece*upper-secondary		-0.19		-0.09
Greece*tertiary		0.24		-0.30**
Hungary*upper-secondary		-0.64***		0.97***
Hungary*tertiary		-1.05***		1.79***
Italy*upper-secondary		-0.06		0.37***
Italy*tertiary		0.04		0.83***
Romania*upper-secondary		-0.78***		0.72***
Romania*tertiary		-3.02***		2.31***
Sweden*upper-secondary		0.40*		-0.38*
Sweden*tertiary		0.93***		-0.72***
Slovenia*upper-secondary		0.58**		-0.55***
Slovenia*tertiary		0.29		-0.39*
Slovakia*upper-secondary		-1.22***		-0.32
Slovakia*tertiary		-1.49*		0.91***
-2 Loglikelihood	80117.229	79550.184	83374.516	82423.185

\* significant at 0.05 level; \*\* significant at 0.01 level; \*\*\* significant at 0.001 level

Reference categories: Spanish young people, men and those parents with lower-secondary education or less.

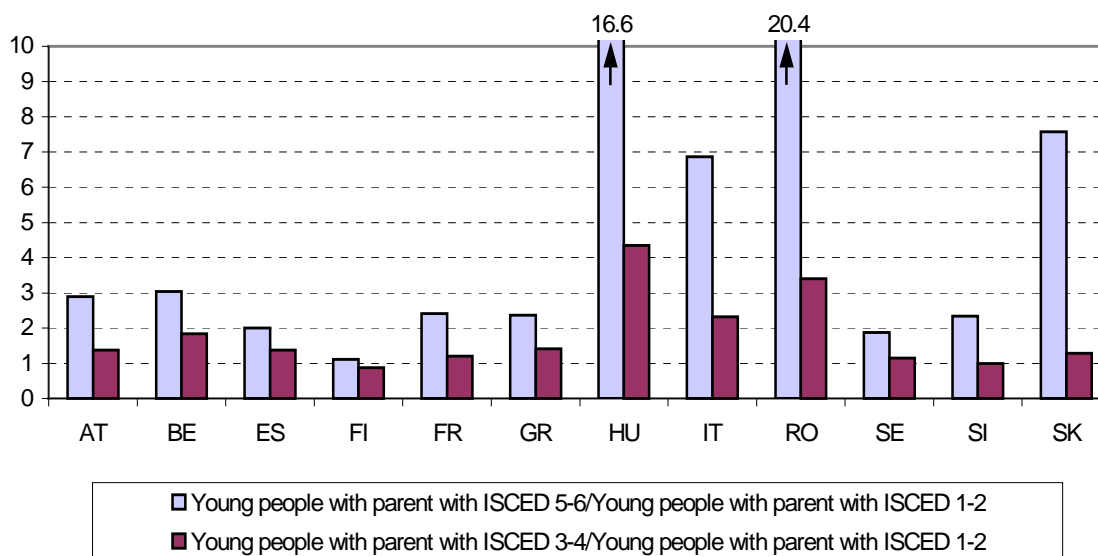
Total number of cases: 71564



### 6.3 Tertiary graduation

After having examined the chances of early leaving, we now pass on to examining the chances of leaving from tertiary education among young people with different social backgrounds. The odds ratios of graduating from tertiary education show that young people with highly educated parents always have a higher chance of graduating than children with less educated parents (figure 1).

**Figure 1: Odds ratios of graduating from tertiary education**



The countries which show comparably low levels of tertiary leavers (i.e. Hungary, Italy, Romania and Slovakia) are also those where the gap between young people with different social backgrounds is higher.<sup>12</sup> The models presented in the third and fourth columns of table 4 test for the significance of the differences found at descriptive level. Parents' education has a strong significant effect on the chances of leaving at tertiary level: thus, young people with highly educated parents have significantly higher chances of gaining a tertiary qualification (model 1). Moreover, even controlling for the effect of gender and social background, young people in Austria, Slovakia, Romania, Italy and Hungary show a much lower likelihood of graduating from tertiary education. With the exception of Austria, the relative advantage of having more educated parents (model 2) is significantly higher in those countries where the proportion of tertiary graduates is particularly low (Slovakia, Romania, Italy and Hungary). As before in the case of early school leaving, the relative advantage of having highly educated parents is also relatively high in Belgium, while Spain (the reference category), France and Austria hold an intermediate position. At the other end of the range, in Finland, Sweden and Slovenia the relative advantages associated with higher social backgrounds are significantly lower.<sup>13</sup> There is again a divide between the Nordic countries (but also Slovenia), which show lower levels of social differentiation, and

<sup>12</sup> No gender differences have been found in the odds ratios of graduating from tertiary education among people who have low and highly educated parents.

the Eastern European countries (with the inclusion of Italy and, to a lesser extent, Belgium) which show higher levels of social differentiation in the chances of tertiary graduation.<sup>14</sup>

To summarise: Substantial improvements in the educational attainment of young people, when compared with their parents' education, have been made in most countries. In Spain, Italy and Romania, however, the chances of young people dropping out at lower-secondary level are still quite high. As expected, in all countries parental education significantly affects the chances of dropping out early (at lower-secondary level) and of graduating from tertiary education. However, there are significant country differences in the extent to which parental educational attainment affects these chances. Social differences in the chances of leaving education early have been found to be relatively small in the two Nordic countries under examination (Finland and Sweden). In contrast, they are particularly large in the Eastern European countries (with the exception of Slovenia) while the Southern European countries tend to have an intermediate position. The relative advantages of having more educated parents in reducing the risks of dropping out early are also on an intermediate level in the countries of Central Europe, with Belgium tending towards the more unequal pole and Austria and France tending towards smaller inequalities. At tertiary level, except for Austria, the countries which have the lowest rates of graduation from tertiary education (Italy, Hungary, Romania, and Slovakia) also show the highest social differences in the likelihood of leaving education with a tertiary qualification. Also at this level more equal opportunities for young people with different social backgrounds have been found in the Nordic countries.

## **7 Parents' education and young people's occupational status**

Overall average occupational status of young people does not differ substantially across countries (table 1). However the dispersion around this average may be more or less pronounced in each country depending on the strength of the effect of young people's educational attainment and social background on their occupational status.

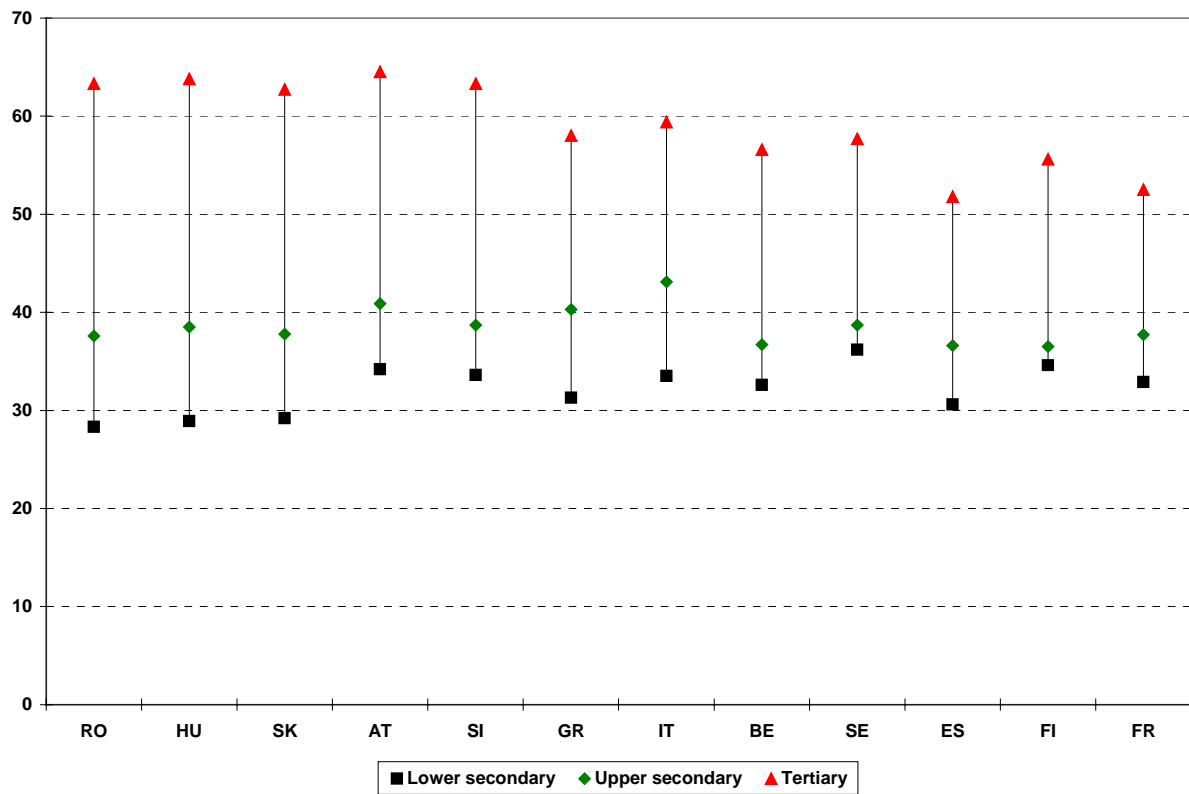
Nowadays, educational attainment is the main determinant of individual occupational positions and larger differences ought to emerge among people with different educational attainments than among people with different social backgrounds. Indeed, figure 2 and figure 3 confirm this expectation: in all countries under examination the gap between low educated young people and the most educated ones in the average occupational status of their first significant job is wider than the gap between young people with lower social backgrounds and those with higher social backgrounds.

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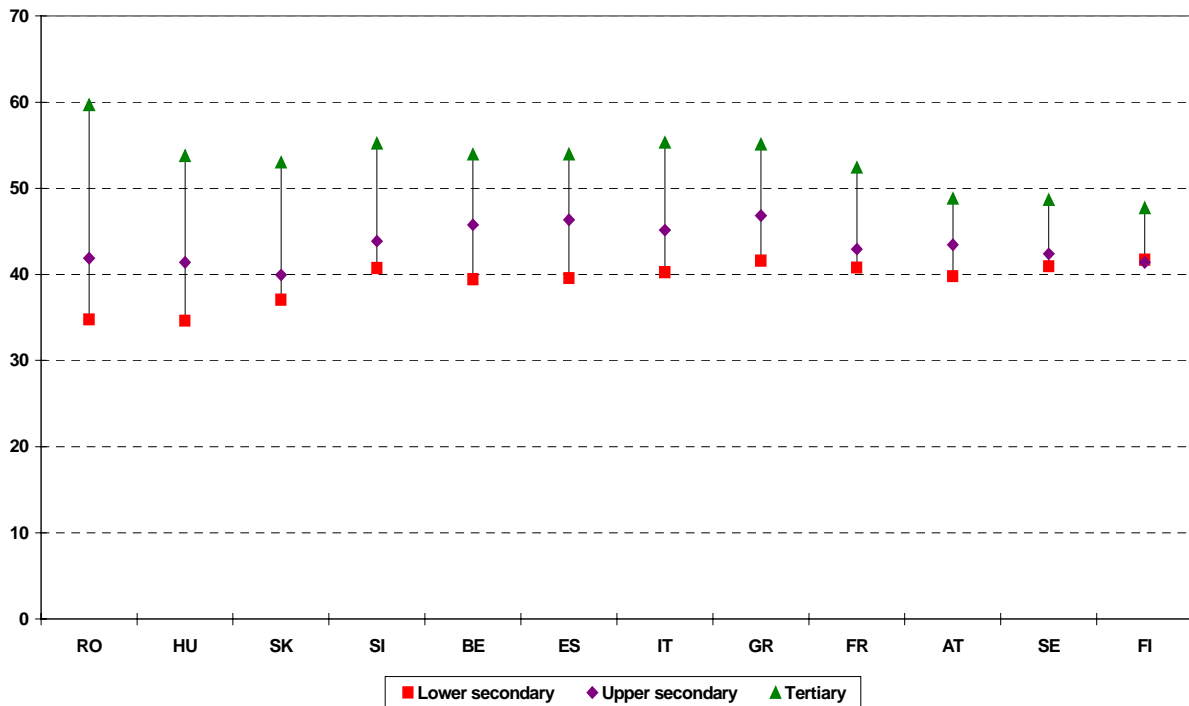
<sup>13</sup> As in the previous analysis, the results do not change when controlling for country differences in the effect of gender.

<sup>14</sup> We have also run a conditional logit model of educational transitions (Mare, 1981) which measures the probabilities of graduating from tertiary education, conditioning the model on the prior completion of upper-secondary education. This model considers only people who continued their studies after lower-secondary education and acquired at least an upper-secondary qualification and it excludes people who dropped out of school early. The results do not differ substantially from those presented in the unconditional logit model (table 4, columns 3 and 4).

**Figure 2: Average occupational status of young people with different educational attainment levels at the moment of leaving continuous education/training**



**Figure 3: Average occupational status of young people with parents with different educational attainment**



Interestingly, the Eastern European countries show that the gap among young people with different educational attainments and different social backgrounds is larger than anywhere else. If in these countries educational credentials are particularly important for the acquisition of better jobs and at the same time the acquisition of these credentials is highly affected by social background factors, then the reproduction of inequalities between generations is likely to be linked mostly to the possession of various levels of education. This issue is addressed in the second research question of this paper. In the countries under examination, is the social advantage of having a highly educated parent transmitted mainly via the acquisition of higher educational qualifications (i.e. indirect effect of parental education)? Or is there a significant (direct) effect of social origin even when controlling for young people's educational attainment?

The results of the pooled sample of countries (table 5) show that the effect of parental education is strong and significant even after controlling for the effect of gender (model 1) and educational attainment (model 2). Thus, a direct effect of parental education on young people's destinations does emerge. However, the strength of the association between parental education and children's occupational status is reduced by approximately half when controlling for educational attainment.

**Table 5: OLS regression of occupational status of first significant job**

	Model 1	Model 2
Intercept	38.28***	28.46***
Female	3.63***	1.95***
<i>Parents' education (ref. Lower-secondary education or less)</i>		
Upper-secondary education	4.35***	2.29***
Tertiary education	13.47***	6.42***
<i>Young people's educational attainment (ref. Lower-secondary education or less)</i>		
Upper-secondary		5.50***
Tertiary		22.16***
<i>Country (ref. Spain)</i>		
Austria	-1.38***	4.49***
Belgium	0.31	1.04***
Finland	-2.96***	-0.40
France	-0.36	0.33*
Greece	1.82***	3.98***
Hungary	-3.05***	2.22***
Italy	0.77***	6.14***
Romania	-2.70***	2.01***
Sweden	-2.40***	1.75***
Slovenia	0.27	3.62***
Slovakia	-3.87***	1.55***
R square (adjusted)	0.102	0.371

\* significant at 0.05 level; \*\* significant at 0.01 level; \*\*\* significant at 0.001 level

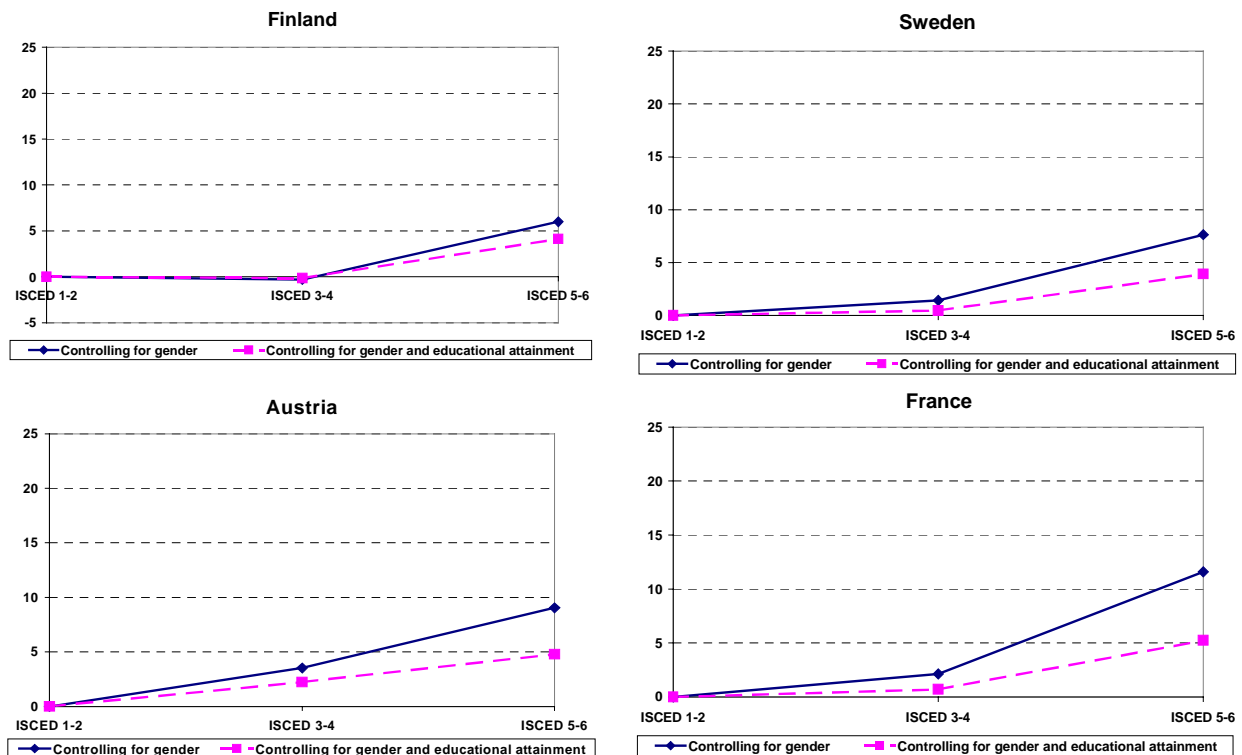
Reference categories: in model 1, Spanish young people, men and those parents with lower-secondary education or less and in model 2, also those who have achieved only lower-secondary education or less.

Total number of cases: 60879

From table 5 it also emerges that the occupational status of young people's first significant job is particularly high in Italy, Austria, Greece and Slovenia. On the contrary, young people in Spain, Finland and France have lower chances of acquiring a high occupational status at the time of first entry into the labour market.

Do countries differ in the extent to which differences in social origin affect young people's occupational position? We present, graphically plotted, the average increase in the occupational status linked to having a parent with upper-secondary and tertiary education (figures 4-15). These results are derived from the OLS regression estimations carried out separately in each country. The two lines in each graph represent the gross (correspondent to model 1) and the net effect (after controlling for respondents' educational attainment, correspondent to model 2) of parental education. Three distinct groups of countries emerge: the Nordic countries (Finland and Sweden), Austria and France where the effect of parental education (both direct and indirect) is smaller than anywhere else (figures 4-7). Indeed, they show the lowest increase in the average occupational status when comparing young people with parents with upper-secondary or tertiary education to young people with parents with only lower-secondary education or less.

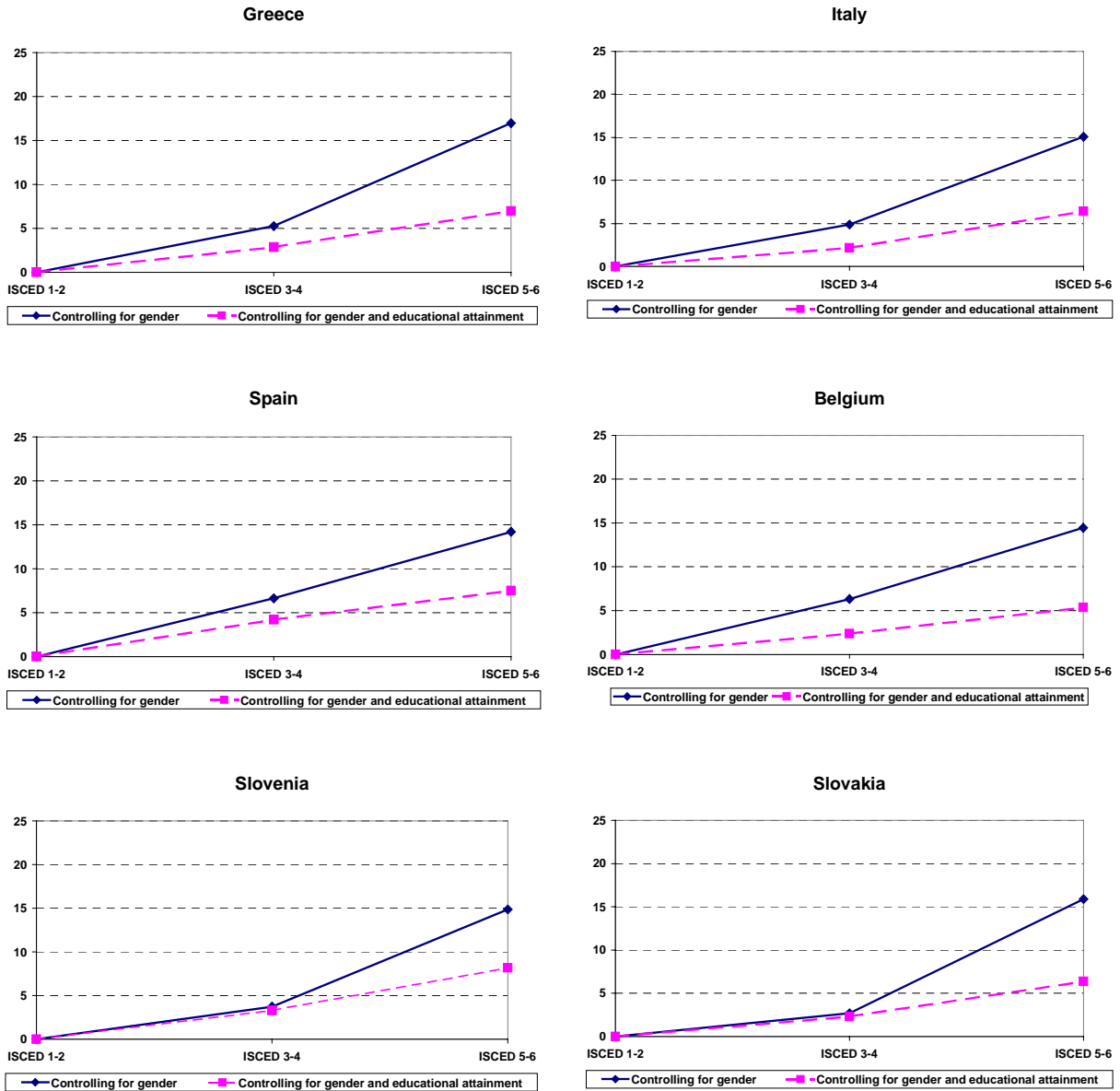
**Figures 4-7: OLS regression effects of parental education on young people's occupational status**



The second and larger group of countries is composed of the Southern European countries (Greece, Italy and Spain), Belgium, Slovenia and Slovakia (figures 8-13). They show a gross effect of parental education on children's occupational status higher than the first group of countries. However, they

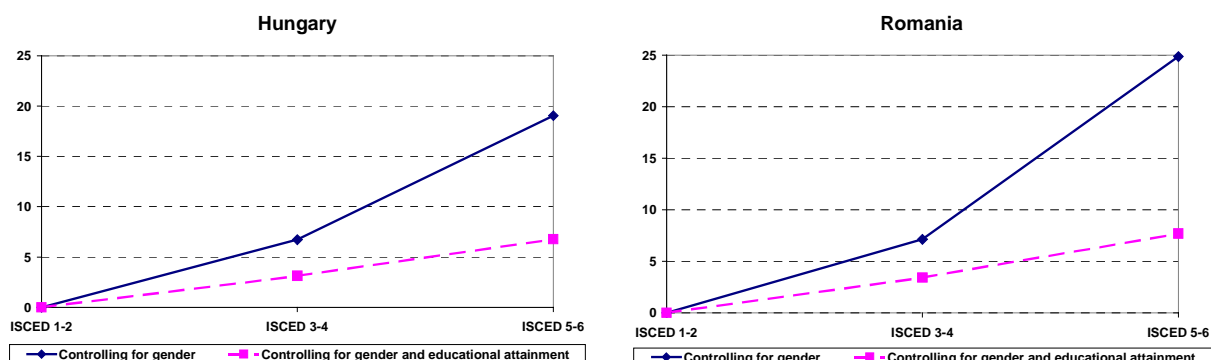
differ from each other in the extent to which the effect of parental education is mediated by young people's educational attainment (see the lower line in the graphs).<sup>15</sup>

**Figures 8-13: OLS regression effects of parental education on young people's occupational status**



The third group is composed by two countries, Hungary and Romania (figures 14-15). In these countries the effect of parental education is particularly strong if compared to the other countries. This is especially true for the gross effect of parental education which is higher than anywhere else.

<sup>15</sup> For example, in Spain and Slovenia the lower line in the graphs is relatively closer to the upper line than in the other countries within the same group indicating that in these countries the advantages of parental education are mediated less through their children's education and appear to operate more directly.

**Figures 14-15: OLS regression effects of parental education on young people's occupational status**

In general, country differences in the gross effect of parental education are much larger than country differences in the net effect of parental education. Indeed, after controlling for individual's educational attainment, the effect of parental education becomes much smaller, even though it still remains significant. Table 6 summarises these results and presents the percentage reduction in the effect of parental education when controlling for the effect of individual's educational attainment (i.e. percentage reduction between the coefficients of model 1 and model 2 of the country OLS regression estimations).

**Table 6: Predicted average increase in the occupational status for young people having parents with tertiary education compared to those with parents with lower-secondary education or less**

	Model 1	Model 2	% reduction in the effect of parental education from model 1 to model 2
RO	24.86	7.68	69.1%
HU	19.05	6.77	64.5%
GR	16.96	6.96	59.0%
SK	15.89	6.37	59.9%
IT	15.07	6.41	57.5%
SI	14.87	8.17	45.1%
BE	14.45	5.36	62.9%
ES	14.19	7.49	47.2%
FR	11.06	5.25	54.7%
AT	9.05	4.79	47.1%
SE	7.64	3.92	48.7%
FI	5.99	4.12	31.2%

There clearly emerges a strong correlation between the size of the gross effect and the extent to which the effect of parental education is mediated through education. In the countries with the largest gross effects of parental education (Romania and Hungary) most of these effects appear to be generated *via* educational attainment of children, while in the countries with the smallest gross effects (Finland and Sweden) relatively little inequality appears to be generated *via*

education.<sup>16</sup> At the top of the list of countries in which the level of parental education shapes most strongly the occupational attainment in young people's first significant job are the countries where – as seen before – the association between children's education and parents' education is strongest. Vice versa, in Finland, Sweden, Austria and France, where the effect of parental education on children's educational attainment is smaller, parental education is also less influential for children's early occupational attainment. The level of social inequality in the educational system thus appears highly consequential for the intergenerational reproduction of inequality.

To summarise, the main findings reported in this section show that the differences in occupational status of first job are larger among young people with different levels of educational attainment than among young people with different social backgrounds. Moreover, a large part of the effect of parental education is mediated by the acquisition of different levels of education. This means that young people with highly educated parents have higher chances of acquiring higher educational qualifications which are crucial credentials for securing better occupational destinations. The results show that there is also a significant direct effect of parental education (that is after controlling for the effect of individuals' educational attainment) on young people's occupational status in all countries under examination. As is the case for the results found in the analysis of the effect of social background on young people's educational attainment, in the Nordic countries the effect of parental education is smaller and in two of the Eastern European countries, Hungary and Romania, the effect is significantly larger than in the other countries. Moreover, in these latter countries the effect of parental education on occupational destinations is mainly indirect, that is mediated by education.

## 8 Conclusions

The present paper aimed to measure the degree of social reproduction in educational attainment and the role of education as intermediary factor in the reproduction of social differences in occupational destinations across twelve European countries. It has benefited from using new data collected at European level (the EU LFS 2000 ad hoc module) which contain information on school-to-work transitions. In particular, for the purpose of this paper, we used the information on the highest level of education or training successfully completed by father or mother, together with the information on the highest level of education completed when respondents left continuous education and respondents' occupational status of first significant job. Supported by previous research and by the existing theories on the mechanisms through which the social advantage continues to be transmitted, we expected to find in all countries a significant effect of social background on young people's educational attainment and early occupational status. However, the strength of this effect was expected to vary across countries due to the strong institutional and other differences that shape educational and labour market attainment in the countries under examination.

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<sup>16</sup> Moreover, even though country variations in the net effect of parental education are smaller than in the gross effect, the net effect of parental education appears to be significantly larger in the Eastern and Southern European countries and smaller in the Northern and Central European countries (see column 2 of table 6).



The results showed that, indeed, parental education still affects young people's educational outcomes. However, social differences in the chances of dropping out from school early have been found to be smaller in the two Nordic countries (Finland and Sweden) and larger in the Eastern European countries (with the exception of Slovenia). At tertiary level, Hungary, Italy, Romania and Slovakia, the countries which have the lowest rates of graduation from tertiary education (together with Austria), show the highest social differences in the likelihood of leaving education with a tertiary qualification. Also in this case the Nordic countries show more equal opportunities for young people with different social backgrounds of reaching the highest levels of education.

In the analysis of the effect of parental education on young people's early occupational destinations it emerged that in all countries there is both a significant direct and indirect effect of parental education on young people's destinations. Overall, half of the association between parental education and children's occupational status can be explained by the association between parents' education and young people's education. However, in most countries, and especially in Hungary and Romania, the indirect effect of social background is stronger than the direct effect. This means that young people from more advantaged social backgrounds are more likely to acquire higher educational qualifications which in turn guarantee them better occupational destinations.

The analyses on the effect of parental education on young people's educational and occupational outcomes have revealed very interesting differences but also similarities among groups of countries. The relative advantage of having more educated parents emerges as stronger in the Eastern European countries and weaker in the Nordic European countries. This is not a surprising finding if it is read in conjunction with the existing literature on these countries. The expansion of education, together with policies offering a more universal type of Welfare State, may have decreased, though not cancelled out, social inequalities in the Nordic countries. On the other hand, earlier research on state-socialist societies has already shown that an equalisation of educational and labour market opportunities between working class and middle class children was partly achieved in the early stages of the communist regimes while later developments towards more equality have been eroded. Moreover, in the transition period towards a capitalist economy, which is the period in which the young people in our sample left continuous education, these countries have experienced an increase in the social and economic disparities. This may have led to a sharpening of educational and occupational inequalities among young people with different social backgrounds. The other Western European countries are in an intermediate position between these two groups of countries. Among them, the Southern European countries are revealed to be another consistent group. The relative advantage of having more educated parents on young people's educational and occupational achievement is similar among these countries (with the exception of Italy in the analysis of young people's chances of tertiary graduation). According to the present data, Austria, Belgium and France appear somewhat more heterogeneous, with Austria and France being closer to the more equal countries while Belgium appears to tend towards more inequality.

The lack of additional information on social background (e.g. parents' occupational class or economic well-being) and on respondents' educational attainment (e.g. type of education attended, vocational or general) must lead to a very cautious assessment of the present results. We were not able to study in detail the mechanisms by which social differences are reproduced in different countries. Moreover, both for a more encompassing European assessment and for more systematic interpretation of the results, the paper would need the inclusion of other countries in the analyses (such as the other Nordic countries, Germany or UK and Ireland). This would help to consolidate results and to identify the factors responsible for the similarities and differences found among the countries. Thus, the collection of more extensive comparable data is highly desirable to improve knowledge on the crucial issue of varying levels of social inequality in the European societies.

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