FINAL REPORT

"A COMPARISON OF EFFECTS ON CAPABILITIES IN TRANSITIONS TO THE LABOUR MARKET"

***EU Collaborative Project "WorkAble"*:**
Making Capabilities Work (2009-2012)

***Work Package 5*:**
Effects on transitional trajectories of young people

***Deliverable 5.2*:**
Final report

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INTRODUCTION

Enrica Chiappero Martinetti

This final report presents the findings of Work Package 5 (WP5) of the EU collaborative research project "*Making Capabilities Work" (WorkAble*).

The overall aim of *WorkAble* is to provide knowledge on how to enable young people to act as capable citizens in the labour markets of European knowledge societies, and to assess political and institutional strategies aimed at countering high rates of youth unemployment, early school leaving and dropping out from upper secondary education.

The project's three main objectives are first, to expand the capabilities of young people to act as fully participating citizens in emerging European knowledge societies; second, to promote skills and competencies in young people that are conducive to improving the economic productivity and competitiveness of Europe; and third, to develop transversal strategies that integrate central economic, educational and social issues, in order to close the capability gap in the young and particularly the inadequacies between education and training and the requisites of the knowledge society to which they, and, above all, the more disadvantaged are exposed.

Using EU-SILC longitudinal data as well as in-depth analyses of specific countries and comparative analyses of pairs of countries, the aim of WP5 ("Effects on transitional trajectories of young people") is to identify and understand the transitions that young Europeans make from the educational system to the labour market, and to assess whether educational strategies contribute to expanding their capabilities for work and social participation. Special attention is given to analysing the degree to which comparable educational attainments among young people lead to different labour market opportunities, depending on the configuration of labour market and educational regimes. WP5 also examines the relationship between education, transitional trajectories and individual well-being and social exclusion, and how this relationship varies between different EU member states.

The present final report contains two main sections. The first section consists of brief synopses for each of the seven papers produced by the researchers participating in WP5. Each synopsis includes the title of the paper in question, the main research question that it poses, the data and methodology utilized, and the main findings. The second section consists of the Annexes, which contain the seven papers in full.

SYNOPSES OF ALL ANALYSES

Paola Alessia Schintu

1. Synopsis of "Labour-market trajectories of young Europeans and educational and occupational intergenerational social mobility in the light of evidence from the EU-SILC (a European comparative perspective of 26 countries)"

by M. Kwiek

1.1 Research question

Equity in access to higher education, or intergenerational social mobility, is of basic importance for at least four reasons: first, it is positively correlated with the development of human capital and human capabilities; second, it is positively correlated with the economic competitiveness of nations; third, it reduces costs in the area of healthcare, income support, child welfare and security; and, fourth, it increases social cohesion, trust and democratic participation. Thus this paper aims to investigate the different levels of inequality in access to higher education among the educational systems of European countries, and to determine to what extent the expansion of higher education systems contributes to enhance social inclusion.

The special focus is a comparative perspective of education's role in young Europeans' labour market trajectories viewed from two separate dimensions: 1) equitable access to higher education; and 2) relative position of higher education graduates in the labour market. The first dimension has been linked to the social background of students as observed through two parallel perspectives: a) the educational background of parents; and b) the occupational background of parents.

1.2 Data

The link between different educational trajectories, on the one hand, and different labour market trajectories of young Europeans, on the other, is analysed based on empirical evidence from the EU-SILC database. This collects microdata on income, poverty and social exclusion at the household level and information about the labour market status and health

of individuals. The database includes both cross-sectional data and longitudinal data. For most countries of the pool of 26, the most recent data available come from 2007 and 2008.

Transitions between the three major labour market status~~es~~ through transition matrices (employment, unemployment and inactivity) are realised following the OECD's *Employment Outlook* series.

1.3 Methodology

The paper first offers a descriptive analysis of labour market trajectories based on transition matrices: the number of transitions from a given labour market status to another one, as a percentage of individuals in the initial year. 2007 is the initial year, and 2008 the final one.

Transitions matrices have been calculated a) by gender and b) by age groups; additionally, transitions have been broken down by 21 countries. Two "positive" types of transitions have been taken into consideration: 1) from unemployment to employment, and 2) from inactivity to employment.

Secondly, the study presents a logistic regression to explore the relationship between the selected socio-economic variables and transitions between non-employment (including both unemployment and inactivity) and employment. The reference country is the United Kingdom, the reference education level is first stage of tertiary education, the reference marital status is divorced, the reference health status is very bad (in Model 1 and Model 2 only) and the reference gender is female. Individual labour market status has been approached through two variables: 1) the basic activity status and 2) the "most recent change in the individual's activity status". Four models of transitions out of unemployment and inactivity (aggregated) have been thus presented. Two classes of socio-economic variables have been used: Model 1 and Model 2 include marital status and health status, Model 3 and Model 4 include only education, gender and age.

The EU-SILC 2005 module “The intergenerational transmission of poverty” has been used for research on intergenerational social mobility. Indeed, it provides data for attributes of the respondents’ parents during their childhood (age 14-16). Furthermore the module reports the educational attainment level and the occupational status of each respondent’s father and mother.

Four educational intergenerational social transitions are analysed:
– fathers with primary education and respondents with primary education,
– fathers with tertiary education and respondents with primary education,
– fathers with primary education and respondents with tertiary education,
– fathers with tertiary education and respondents with tertiary education;

and two occupational intergenerational transitions are studied:
– respondents with elementary occupation, in relation to the occupation of their fathers (ISCO group 1 through 9)
– respondents with ISCO group I occupation (1. legislators, senior professionals, 2. professionals, and 3. technicians and associate professionals), in relation to the occupation of their fathers.

1.4 Main findings

The paper states that in the great majority of European higher education and labour market systems, higher educational levels lead to better jobs and better life chances. However, it adds that as seen from Fred Hirsch’s theoretical perspective of “positional goods” (1976), there is always “social congestion”: the number of good and top jobs in a given labour market system is always limited, regardless of the educational level of its workforce. As a consequence, educational expansion in labour markets with a glut of higher education graduates has clearly different results than educational expansion in labour markets that are far from being saturated. For example, EU-SILC data demonstrate that on average, EEC countries have considerably less educated labour forces, so rewards from higher education

are higher: for example, low levels of unemployment for higher education graduates and relatively faster transitions from unemployment to employment.

Moreover, while the collective benefits of educational expansion are on the rise, individual ones, e.g. the proxy of wage premium for highly educated, are not. In fact over the last decade the wage premium has been consistently high and increasing in post-communist Central European economies such as Poland, the Czech Republic, Slovakia and Hungary, while it has been much lower, and stable or decreasing, where educational expansion began earlier (for example, in the Nordic countries).

The EU-SILC dataset offers the possibility of studying the inequality of educational outcomes and of relevant coefficients by comparing those young Europeans whose father (and/or mother) had tertiary education credentials with those whose father (and/or mother) had compulsory education credentials or less. In more equitable national educational systems, not only will the educational trajectories of young Europeans with different social backgrounds be more similar; their labour market trajectories will be as well. By contrast, in less equitable national educational regimes, both the educational and the labour market trajectories of young Europeans with different social backgrounds will be significantly different. In short, higher education will be less "inherited" in more equitable societies. EU-SILC data show cross-country differences and country clusters of this phenomenon.

OECD data for the last decade show that higher education attainment for the population aged 25-64 has been increasing throughout the EU-21 area in the 1997-2009 period. Most of the changes in educational attainment have occurred at the low and high ends of the skill distribution, in part as a result of the expansion of higher education in many countries in recent years. As OECD's *Education at a Glance 2011* explains, this expansion has generally been met by an even more rapid shift in the demand for skills in most OECD countries.

What works on an individual basis does not seem to work from a larger social perspective: individual efforts may be largely lost if all young people undertake the same efforts, as these efforts may not finally lead to better individual life chances. The pool of "good jobs" seems to have shrunk in Europe, as elsewhere, and the idea that higher education always leads to

middle-class lifestyles and living standards may be increasingly misleading. As a consequence, the living standard of young Europeans faces a serious risk of being lower than that of their parents; this is particularly the case for the middle classes.

2. Synopsis of "Effects of scarring on transitions of young people in the UK" by R. Raeside, R. McQuaid with V. Egdell, E. Hollywood and H. Graham

2.1 Research question

Younger people, particularly males, appear to be far more affected by the current economic crisis than any other age group: indeed, this category presents a long list of problems related to long-term unemployment. This paper focuses precisely on the 'scarring' effects of the length of unemployment, and considers the progress of a UK cohort of people aged 18 to 24 years in 1998 through to 2008: in particular, the study investigates the effects upon pay, likelihood of unemployment, and wellbeing (i.e. satisfaction with life).

2.2 Data

Data come from the British Household Panel Survey waves and correspond to H, which is mainly 1998, and R, which is mainly 2008. They are modelled to determine variables associated with monthly pay, the likelihood of unemployment and overall satisfaction with life for the years 1998, 2003 and 2008**.** The cohort of those aged 18 to 24 in 1998 are followed for a decade, hence by 2008 they are 28-34 years old.

2.3 Methodology

Methodology for pay

Taking three waves corresponding to 1998, 2003 and 2008 for those aged 18 to 24 in 1998, an Ordinary Least Squares (OLS) regression model was used to fit the natural log of the last month's current pay. Two further variables were included in the analysis in order to determine the scarring effects of having been unemployed 5 years before (in the case of 2003) and both 5 and 10 years before (in 2008), using the measure of weeks unemployed in the respective years.

Methodology for unemployment

As the dependent variable is binary (employed or unemployed), a binary logistic regression was used to obtain the probability of being unemployed in the respective year. In these models the dependent variable is 1, if being unemployed, and 0, if in work or in education and training.

Methodology for wellbeing (or satisfaction with life)

A binary logistic regression model was used to model "satisfied with life" (value = 1) versus "not particularly satisfied" (value = 0). Further financial related variables are included: the individual's financial situation (as measured by the question of how well is the person doing financially), the natural log of last month's pay, annual weeks unemployed in that year and pay change from 5 and from 10 years earlier.

2.4 Main findings

In the three models, the factors that were important for better outcomes varied across each of the dependent variables. For pay, factors significantly associated with greater pay included being male, being older (within the 18-24 age group), being single, having children, not being in higher education or training (the 'other' employment group) and not losing confidence. In later years, as the cohort gets older, higher qualifications become increasing important to enhancing pay levels and are only significant in later years; in addition, renting becomes significantly (negatively) associated with pay.

For unemployment, being single or having (more) children in 1998 were significantly linked to it (although this was not the case in later years). Not having resources (no access to a car or van) was also associated with being unemployed.

For satisfaction with life, a low level of it was linked to low qualifications (as with pay in 2003). Being female was significantly associated with lower pay in each year, but with lower unemployment (in 2008) and higher life satisfaction (in 2003).

In all three cases, losing confidence was associated with negative results: less pay, a higher likelihood of unemployment, and lower life satisfaction. This suggests that confidence is an important aspect of labour market success and a key aspect of improved capability.

For pay, many of the same variables were significant for each of the three years taken into consideration, but this was less the case for unemployment and life satisfaction. There is strong evidence of scarring in 2008 in terms of pay with the number of weeks unemployed 10 years before, when they first entered the labour market, and 5 years before, both being significant.

For unemployment, there is a scarring effect between the likelihood of being unemployed in 2003 and the number of weeks unemployed when entering the labour market some 5 years previously, while in 2008 there is a pronounced effect of scarring in that the number of weeks unemployed 5 and 10 years previously are significantly (positively) associated with being unemployed.

For life satisfaction, there are no significant scarring effects due to previous unemployment.

3. Synopsis of "Labour market trajectories and young Europeans' capabilities to avoid poverty, social exclusion and dependency: a comparative analysis of 23 European countries" by B. Halleröd and H. Ekbrand

3.1 Research question

The paper starts from the assumption that a life without economic hardship and an independent household are functions that young people have reason to value, and asks why young Europeans to a large extent lack the capabilities to do so. More specifically, the study aims to investigate the link between young people's living conditions and their labour market related position.

If we consider that all people, throughout their lives, are in a transitional phase, it is not only possible to see that some periods in life, such as adolescence, are more volatile than others, but also to investigate to what degree different types of trajectories have different implications on people's lives. Indeed, the authors state that at any given point in time people can be assigned a specific relationship to the labour market. Therefore it is useful to understand different employment positions as existing along a continuum of marginalization from total integration to total exclusion (Svedberg 1997). But the issue also concerns the types of transition. In fact, two individuals who are exposed over a given period of time to the same amount of unemployment might be in very different labour market positions. One may have been pushed out of employment and into poverty, while the other might be in a process from education into labour market integration and economic security.

The aim of this paper then is to answer four specific research questions:

- What types of dominating labour market related trajectories (LMRT) exist within the EU?
- What kind of LMRTs are specifically common among young Europeans?
- What kind of LMRTs are especially related to poverty, social exclusion, and lack of independency among young Europeans?
- Are there substantial differences between EU countries?

3.2 Data

The paper's data source is the EU-SILC longitudinal dataset from 2007 and 2008 concerning 23 EU countries, including the non-member Norway. The authors have restricted their sample to the age spectra 16-65, focusing on the age span 16-25. The EU-SILC panel data follows a four year cycle, meaning that every individual is followed for four years and every year a fourth of the sample is replaced by a new panel section. In order to have an adequate sample the authors decided to use a three-year panel: first, they selected those who participated from 2006-2008; then they added those who participated from 2005-2007. The total survey size is 148,619 and the age restricted (16-25) sample size is 26,755.

3.3 Methodology

EU-SILC interviews asks respondents to give a retrospective description of their main activity. For every month nine alternatives are offered: 1) Employee (full-time); 2) Employee (part-time); 3) Self-employed (full-time); 4) Self-employed (part-time); 5) Unemployed; 6) Retired; 7) Student; 8) Other inactive; 9) Compulsory military service. Thus, in order to obtain clusters of specific labour market trajectories all individuals have 36 consecutive monthly measurements of main activity. Main activity positions were reduced to 7 (9^{th} category is excluded and 3^{rd} and 4^{th} are collapsed). Since 7^{35} is still a large figure, a cluster analysis where each month was considered as one variable was conducted using the clustering algorithm "clara" (Rousseeuw 1990) based on a pseudo-Gower metric of dummy variables. From this, 34 clusters were derived. Further reduction of data was obtained by merging clusters with similar main activities onto a categorization of 17 trajectories, of which 7 were stable and 10 derived from the cluster analysis.

The income poverty measure is equal to the measure of 'at-risk of poverty' used within the EU: "a person is poor if he or she lives in a household with an equivalent disposable household income that falls below 60 percent of the median equivalent disposable income in the Member State where he or she lives".

The material deprivation measure follows the operationalisation approach suggested in a EU report by Bradshaw and Meyhew (Bradshaw and Mayhew 2011), who in turn are building on the work by Guio (2009).

The set of indicators used to identify what the household could not afford is:

- To face unexpected expenses
- One week annual holiday away from home
- To pay for arrears (mortgage or rent, utility bills or hire purchase instalments)
- A meal with meat, chicken or fish every second day
- To keep a home adequately warm
- To have a washing machine
- To have a telephone
- To have a personal car
- To have a computer
- No bath or shower
- No indoor flushing toilet for sole use of the household

The deprivation measure ranges from zero to eleven. Following Bradshaw and Meyhew, the dividing line between the deprived and non-deprived has been set to three, i.e. anyone who scores three or higher on the deprivation index is defined as deprived.

Independent living: being able to leave the nest and forming an independent household is an important aspect of young people's capabilities. It is also important in relation to measures of both deprivation and poverty.

A mixed model was chosen for the analysis of the impact of labour market trajectories (LMTs), starting from an analysis of the relationship between LMTs and household independency with a null model that estimates only country differences. Thereafter, LMTs at the individual level were included in order to find out if and to what degree LMTs affect individual probabilities and country differences. Then control for age, gender and education was added. The final model also controlled for GDP per capita. Next, the authors repeated

these steps using poverty as a dependent variable. However, when analysing poverty in the third step, the authors also controlled for nest-leaving. Finally, deprivation analysis was done in the same manner, but in the third step including also poverty as a control variable.

3.4 Main findings

This work tell us that young people in Europe are differently exposed to different types of LMTs. Certain labour market trajectories are closely related to all three of the paper's outcome indicators: poverty, deprivation and independent living. However, labour market trajectories could only explain some of the between-country differences. The differences when it comes to distribution of labour market trajectories could thus not explain many of the differences in poverty, deprivation and independent living between EU countries. The paper does not explore whether or not LMTs have different effects in different countries, i.e. if the slopes are random.

The analysis shows that youth poverty is most common in the Nordic countries and much less common in countries with considerably lower GDP per capita. Looking at deprivation, the picture is completely reversed and distribution between countries to a large extent follows GDP per capita distribution. The reason for this pattern is that young people in the Nordic countries leave the nest at early age and thus are not protected from poverty by their parents' income. Nevertheless, they are deprived to a lesser extent than most other young people in Europe. The authors therefore suggest that the Nordic countries have managed to build a system where young people have the capability to set up an independent household at an early age. It makes them relatively poor, but not particularly deprived; and it could be that they believe that poverty is a price worth paying for being capable of living a life they have reason to value.

4. Synopsis of "Youth unemployment, youth programs and mental health scarring in Sweden – long term mental health effects of two different forms of unemployment experiences" by M. Strandh, M. Nordlund and A. Hammarström

4.1 Research question

The current global economic crisis has increased unemployment for most groups on the labour market, but has affected youth in particular. There is a risk that this phenomenon will create long-term labour market problems for the current generation of youth. The main policy tool to combat these scarring effects has been Active Labor Market Policy Programs (ALMPs) for youths. Research on ALMPs has been strongly focused on how human capital and job chances are directly affected by participation. This paper is instead dedicated to looking at mental health scarring over the life course, with two perspectives in mind: 1) whether these effects exist; and 2) whether time spent in youth programs has less effect than time spent in open unemployment.

4.2 Data

The data source for this research is the Northern Swedish Cohort, a panel survey following all pupils who studied or should have studied at their last year of compulsory school at age 16 in a medium-sized Swedish industrial town in 1981, and who have been re-interviewed with extremely low attrition at ages 18, 21, 30 and 42. The survey data have also been complemented with register data from the Longitudinal Integration Database for Sick Leave and Labour Market Studies (LISA).

4.3 Methodology

Unemployment and participation in youth programs have been investigated through questions where respondents at age 21 report the number of weeks they have been employed, studying, openly unemployed or have participated in labour market programs since the last interview at age 18. From this, two continuous exposure variables have been derived: 1. Accumulated months in open unemployment 18-21, and 2. Accumulated months in youth programs 18-21.

A composite index has been constructed for mental health study. The authors call it the "Psychological Problems Index", and it combines the prevalence of three psychological symptoms during the preceding year: nervous symptoms, depressive symptoms and sleep problems on a scale from 0 (never) to 4 (constantly).

Additional control variables are gender (woman or man), parental social class at age 16 (Both blue collar; One blue collar and one white collar; Both white collar) and parental employment situation at age 16 (one parent not in employment or both parents in employment).

The method for statistical analyses is constituted by simple Pearson correlations for original descriptions of the relationship between the two exposure variables and mental health at ages 16, 18, 21, 30 and 42. In order to investigate the questions posed in the paper, data have been used longitudinally as repeated measures, therefore the document utilises a repeated-measures linear mixed-models approach with random intercepts.

4.4 Main findings

The research findings lead the authors to two fundamental conclusions. Firstly, there are strong negative effects of open unemployment on mental health in the short term, with severe scarring effects at age 21. However, exposure to open youth unemployment also appeared to leave mental health scars visible at both age 30 and age 42. These long-term scars were less intense than those observed at age 21, yet were both significant and stable

over time. The authors see at least two possible general explanations that seem promising for further research. First, the unemployment experience could actually lower the mental health set point. This could be due to a phenomenon of general nature or related to youth as a sensitive period in the development of identity. It could also be related to social chain reactions: initial unemployment experiences could lead to a suboptimal socioeconomic career involving experiences related to lesser mental health.

The other main conclusion of the paper concerns participation in youth programs. This seems not to cause the same negative short- and long-term mental health scarring as youth open unemployment. Indeed, researchers found only weak effects at the age of 42. The much lower level of negative mental health scarring effects in youth programs could be related to their characteristic of maintaining the level of mental health in unemployment by mitigating some of the destructive psychological features of this situation. Alternatively, or in addition, unemployment could affect the capabilities necessary for leading a successful life both on and off the market.

5. Synopsis of "Class, education and non-market capabilities: A longitudinal study of parental social class, education and the non-market capabilities of subjective health, voice and agency" by E. Nordlander, A. Brännlund and M. Strandh

5.1 Research question

This study starts by observing how the European experience following the global economic crisis has highlighted the vulnerability of youth in general. In this context, education has been seen as a central tool for furthering the labour market and social integration of youth, by increasing their employability and human capital. This paper underlines how the rapid pace of change in labour markets and society might focus increasing importance on other aspects, such as sustainable employability during the life course. Seen from this perspective, a capability approach analysis of educational outcomes must not limit itself to manifest outcomes, but also take into account the role of educational participation in activating critical factors for a good life, such as the capabilities for voice, autonomy and good health. Moreover, the capability approach raises questions about how education and differences in education matter for realizing capabilities relative to the preconditions of the students. The aim of the present paper, therefore, is to investigate the relationship between social backgrounds as parental social class, educational attainment and the non-market capabilities of voice, autonomy and health.

5.2 Data

The authors' data source is the Swedish Survey of Living Conditions (ULF, Undersökningarna av levnadsförhållanden) by Statistics Sweden. This is an annual individual level survey of living conditions in Sweden that is based on in-person interviews with a random sample of the population aged 16-74. The questionnaire includes information on multiple dimensions of living conditions (such as health, social relations, working life, economy physical environment) as well as background and demographic information on the respondent. The interviews are further supplemented with information on income, pensions, taxation,

student aid, etc. from administrative registers. A partial panel approach has been used since 1979 and about half of each year's sample is re-interviewed every eight years. The panels are updated with new youth cohorts and immigrants each panel wave in order to keep the panel representative. For this study the authors selected all respondents who were still teenagers and participating in one of the surveys 1988-1995 and re-interviewed eight years later (1996-2003). Therefore the sample consists of 1,058 young individuals (528 women and 530 men).

5.3 Methodology

The independent variables in the study are parental social class (Blue Collar, Lower White Collar, Middle White Collar, Higher White Collar, Self-employed -> Blue Collar, other, Higher White Collar) and individual educational attainment (Compulsory or less, 2-year upper secondary, 3-year upper secondary, University).

In addition there are some control variables: baseline capability at *t*, gender, geographic area at *t*, parental country of birth, cohabitation at *t+8*, children at *t+8*.

The dependent variables relate to subjective health and the two central capabilities of agency and voice at the second wave of interviews. As the sample consists of young respondents, who typically are in good health, the subjective health variable has been recoded into a dichotomous variable (in good health or not). The capability of agency has been coded into a dichotomous variable called "ability to appeal government decisions". Finally, the capability of voice has been coded into a four-value scale variable named "activity level in political discussions".

Multivariate analyses use standard techniques. The voice variable is treated as a continuous variable and OLS-regressions are utilised. The regression coefficients represent the estimated difference on the voice scale between the study category and a reference category, all other control variables in the model equal. For the agency and subjective health variables binary logistic regressions are applied.

A step-by-step analytical strategy has been employed with the aim of adding the independent variables to four regression models. In the first model, only parental class is added, making it possible to see the bivariate relationship between parental social class and dependent variables. In the second model, baseline values for the dependent variables are added, making it possible to see to what extent the differences in the dependent variables between social classes represent a stable social class effect. In the third model, the authors added educational attainment at the second interview to see 1) the effect of education on dependent variables controlling for baseline values, and 2) to what extent residual differences between different social class backgrounds are related to differences in educational attainment. The final model adds gender, geographic area, parental country of birth, cohabitation and children, in order to control for complex effects related to these variables.

In addition, the paper offers three further models where the full regression model is run separately for three categories of parental class (blue collar workers, higher white collar workers and others), in order to investigate if education has the same relative importance for youth from different social class backgrounds. Categories have been chosen in order to concentrate on the group that might be the most vulnerable because of the relatively low parental education, i.e. blue-collar workers, as well as the group that comes from a high education background, i.e. higher white-collar workers.

5.4 Main findings

Firstly, this research shows how class background matters for the non-market capabilities of agency and voice, but not for subjective health. The pattern fits the level of educational requirements that the class scheme is built on. A substantial part of the effect of parental class on agency and voice can be explained by a class gradient in educational attainment. Secondly, the paper shows that education, primarily university level, matters for the non-market capabilities of voice, agency and health. Thirdly, social class of origin is strongly related to educational attainment and the study's results suggest that a substantial part of the effect of parental class on agency and voice can be understood by a class gradient in

educational attainment. Last but not least, the paper demonstrates that education matters more for youths with a blue-collar background and less for those with a higher white-collar background for all three non-market capabilities studied.

6. Synopsis of "Labour market outcomes of early school leavers using a capability-based approach. A comparison of France, Italy, Poland and Sweden" by M. Lambert, I. Marion, J. Vero

6.1 Research question

This research aims firstly to investigate two issues: early school leavers (ESLs) and the activation labour market policies (ALMPs) aimed at them, in a European comparative context. Using the capability approach, the authors then discuss the use of the employment rate as an indicator for studying the school-to-work transition, arguing that it reflects those normative preferences and ideological positions according to which this transition is seen as an adaptation to labour market requirements rather than real freedom for workers. They explain the shift of emphasis which would be entailed by the notion of capability for work, and highlight some issues that are traditionally left aside by the employment rate. The paper attempts to take a step towards a capability-based approach to labour market outcomes and, for this reason, in accordance with guideline 7 of the Europe 2020 targets, it focuses on developments in employment rates, unemployment rates and forms of non-standard employment, taking into account different subgroups in four countries that hold opposing views of the labour market and social security: France, Italy, Sweden and Poland.

6.2 Data

Data used for ESL and the labour market outcomes analyses for ESLs come from the EU-SILC from 2007, hence the paper does not involve any distinction between lower and upper secondary school.

6.3 Methodology

For the analysis of the labour market outcomes for ESLs the authors harmonised EU-SILC data. To provide figures that matched with the accounts categories and frames defined at the European level, they elaborated national sources either prior to or during the questionnaire design or later in statistical processing procedures. However, as the authors themselves explain, this process in no way removes differences due to heterogeneities resulting from the specificities of national institutions or the management modes of national public policies.

6.4 Main findings

The research findings show that, notwithstanding national differences, the jobs available to European ESLs are for the most part temporary or compulsorily part-time. Moreover, these jobs are more often available for women than for men. If we look at the reasons that ESLs give for working part-time, we find that generally they would prefer to work full-time, but are unable to find this kind of job. In the authors' opinion, this indicates ESLs' lack of capability to enjoy work that they have reason to value.

Secondly, the findings demonstrate the limitations of people aged 18-24 in terms of the school-to-work transition analysis. According to the authors, a school-leaver category deriving from national educational systems fits much better for this purpose in part because they have a higher probability to find a job, for the simple reason that they are available to the market sooner than young people of the same age who continue their studies.

Finally, the paper makes reference to the next paper in this final report, where two of the paper's authors, together with others, conduct a longitudinal study of youth labour market outcomes as a means for better understanding the school-to-work transition and the capability for work.

7. Synopsis of "Would active labour spending enhance the capability for work of entrants. Empirical evidence from 21 European countries" by M. Lambert, J. Vero, B. Halleröd, H. Ekbrand

7.1 Research question

The paper begins by stating that today, activation is of fundamental importance for integrating people into the European labour market. However, it observes that this policy implementation raises questions about the actual meeting of those conditions that allow young entrants to exercise their responsibility and to take part into the labour market, without forgetting the respect for their real freedom to choose work that they judge valuable. Hence the authors uses the capability approach to analyse how individual and environmental factors interact in affecting processes that lead to a capability for work.

In particular, they seek to answer to three groups of questions:
1) What kind of dominating labour market trajectories occur among young Europeans who left school?
2) Are there significant differences between early school leavers and the average population of their age group?
3) Does ALMP spending have impacts on labour market outcomes? How large are ALMP effects on the various trajectories previously identified? Does ALMP ensure professional pathways? What other factors affect the capability for work?

7.2 Data

The data source for the research is the EU-SILC longitudinal data from 2007-2008 from 21 countries. The countries included in the analysis are those covered by the EU-SILC data. The sample has been restricted to people who are 16-30 years old and who left the educational system prior to 2005-2006, i.e. the sample is constituted by the first wave of the longitudinal survey 2007-2008. As was explained in Björn Halleröd and Hans Ekbrand's paper, the EU-SILC

panel data follows a four year cycle, meaning that every individual is followed for four years and every year a fourth of the sample is replaced by a new panel section. Therefore, in this case too a three-year panel was used in order to have a sufficient sample. The authors first selected those who participated during 2006-2008 and then added those who participated during 2005-2007. The total survey size was thus 152,994 and the young group 20,909.

7.3 Methodology

As we have already seen, for every month nine alternatives are offered: 1) Employee (full-time); 2) Employee (part-time); 3) Self-employed (full-time); 4) Self-employed (part-time); 5) Unemployed; 6) Retired; 7) Student; 8) Other inactive; 9) Compulsory military service. Again, all individuals have 36 consecutive monthly measurements of main activity. According to Halleröd and Ekbrand (2012), this monthly information is used to obtain clusters of specific labour market trajectories. Then, in this study too the 9 main activity positions are reduced to 7, as follows: 1) Employee full-time; 2) Employee part-time; 3) Self-employed 4) Unemployed; 5) Retired; 6) Student; 7) Other Inactive. Multilevel models (Snijders 1999, Bressoux 2008) are used to specify the effect of social context and to explore the link between the macro and micro levels of social phenomena. The analysis starts from the hypothesis that people are nested within countries: it provides fixed effects that are assumed to be homogeneous across countries, and random effects capturing differences between countries.

Seven multilevel logit are used for getting results. The models reveal the relationship between the six labour market trajectories and the conversion factors that may influence these variables. Individual conversion factors are sex variable, level of education, residential autonomy and parental situation (when applicable). Social conversion factors include ALMP expenditures, youth unemployment rate and ESL rate.

7.4 Main findings

The research results show that on average, ALMPs have little, if any, effect on the capability for work. Indeed, their overall cost-effectiveness is ambiguous. The authors find that while ALMPs may increase employment rates for targeted groups, this may have a negative effect on the capability for work. Indeed, the paper demonstrates that the effect on increasing the capability for work with a dynamic view of this phenomenon is not substantiated: there is no evidence that ALMPs are effective in achieving their goal of inserting people into a sustainable path of employment quality.

However, the authors believe that more comprehensive study could be undertaken in order to identify the obstacles that keep ALMP spending from achieving its goal, and call for an analysis that would put at its core the freedom aspect of the capability for work.

FULL RESEARCH PAPERS

A. Labour-market trajectories of young Europeans and educational and occupational intergenerational social mobility in the light of evidence from the EU-SILC (a European comparative perspective of 26 countries)

Marek Kwiek

1. Introduction

1.1. Theoretical contexts and initial premises

The special focus of the present article is the role of education in labor market trajectories of young Europeans: the role of various levels of education, especially viewed from two separate dimensions: equitable access to higher education and the relative position of higher education graduates in the labor market, from a comparative European perspective.

Equitable access to higher education will be linked to social background of students, viewed from two parallel perspectives: educational background of parents and occupational background of parents. Different patterns of intergenerational social mobility across European countries are explored, and clusters of more equitable (or mobile) and less equitable (or mobile) countries are shown. The most recent available empirical data from European Union Survey on Income and Living Conditions (EU-SILC) is used for cross-country comparisons.

It is generally assumed in both current scholarly and policy literature that major higher education systems in the European Union and, generally, in the OECD-area, will be further expanding in the next decade (Altbach et al. 2010, King 2004, Trow 2007, Attewell and Newman 2010, Santiago et al. 2008, OECD 2008, EC 2011). Expanding systems in general terms tend to contribute to social inclusion because the expanding pie "extends a valued good to a broader spectrum of the population" (Arum et al. 2007: 29).

In the knowledge economy, expansion of higher education systems is key and high enrolment rates in the EU have been viewed as a major policy goal by the European Commission throughout the last decade, at least since the Lisbon Strategy was launched in 2000, followed by the Europe 2020 strategy launched in 2010. Its most recent Communication (September 2011) states again that attainment levels in higher education in Europe

> are still largely insufficient to meet the projected growth in knowledge-intensive jobs, reinforce Europe's capacity to benefit from globalisation, and sustain the European social model (EC 2011:3).

The empirical data from both the EU-27 and from the OECD area demonstrate that indeed educational expansion has been in full swing in the developed world in the last two decades (and educational contraction in the next decade is a serious policy issue for only several countries: Poland in Europe, and Korea and Japan in Asia. The three countries are exceptions to the general rule in which further educational expansion is expected, though). The expansion has several new dimensions which may include, to a degree depending on a country, non-traditional routes to higher education, international students, non-traditional age students, shorter study programs (bachelor level rather than masters level) and lifelong learning opportunities. The expansion in Europe thus includes both new students and returning students, and the social base of higher education systems is expected to be enlarged.

The question of inequality in access to higher education is usually asked in the context of educational expansion:

> the key question about educational expansion is whether it reduces inequality by providing more opportunities for persons from disadvantaged strata, or magnifies inequality, by expanding opportunities disproportionately for those who are already privileged (Arum et al. 2007: 1).

Educational expansion, in most general terms, and in the majority of European countries studied (with the exception of the unitary system in the Czech Republic, Mateju et al. 2007),

seems to be reducing inequality.[1] Specifically, EU-SILC data are used for more detailed cross-country analyses.

Thus, generally, education expansion has been a common process throughout Europe in the last two, and often three decades (expansion is a long-term process on a global scale, details of expansion, and especially an annual rate of growth of educational systems in particular countries studied, are found in OECD's *Education at a Glance: 2011*).

From the perspective of fair access to higher education and transitions from education to employment and to unemployment (and particularly, transitions between different labor market statuses by levels of educational attainment, especially higher education), different processes were taking place in different countries, or clusters of countries, in the last decade. These processes were producing different trajectories of access to higher education (studied here from the point of view of social and economic background, or by different socio-economic classes) and different labor market trajectories, based on the highest level of education attained.

The policy starting point in research into equity in access to higher education for young Europeans, from the European policy perspective, is the London Communique of the Bologna Process (2007) which states (reflecting current social sciences research on equitable access to higher education, social stratification, and social justice) that:

[1] Another useful European dataset is Eurostudent: *Social and Economic Conditions of Student Life in Europe, 2008-2011*, based on a sample of over 200.000 students from 25 European countries. From a European comparative perspective, Polish higher education system has been (Eurostudent 2011) classified in a typology of social inclusiveness as a "transition" system, neither socially inclusive (such as, for instance, Ireland, the Netherlands and Switzerland), nor socially exclusive (such as, for instance, Germany, France). Poland in higher education, together with Italy, Spain and Portugal, has a low overrepresentation of the high education students (educational background: parents attained higher education) but, at the same time, have comparatively low scores on low education students (parents attained higher than lower secondary education). This means that these countries are "good at motivating students from the middle group (non-tertiary, but above lower secondary level) to enter higher education" (Eurostudent 2011: 51). Another simple measure for social mobility, the share of students in a higher education system whose parents have or had a "blue collar" occupation, shows that the Polish system is relatively inclusive: the share is 44%, the fourth highest in Europe (with other biggest systems far lower: Italy 28%, Spain 26%, Germany 21%, France 19%, Eurostudent 2011: 55).

the student body … should reflect the diversity of our population (London Communique 2007).

Equity in access to higher education, or, in other words, more open intergenerational social mobility, is of primal importance for several reasons: first, it is positively correlated with human capital development (as well as the development of human capabilities) and, second, it is positively correlated with the economic competitiveness of nations (as measured annually by, for example, Global Competitiveness Index, 2010 which includes an important pillar of "tertiary education", see Kwiek 2011). As is well known from comparative studies by both the World Bank and OECD, both the long-term social and long-term financial costs of educational failure are high: those without skills, to fully participate socially and economically in the life of their communities, generate higher costs in the area of healthcare, income support, child welfare and security. Equitable access to higher education enhances social cohesion and trust, and increases democratic participation (all those dimensions are systematically measured by OECD through their indicators). There is a positive correlation between the highest levels of education attained and democratic participation, voting patterns, heath and other indicators of well-being. This is what human capital approach stresses; capabilities approach rightly stresses that education is "far more than human capital", "expands capabilities and functionings", "enlarges valuable choices", "influences democratic social change by forming critical voices", "involves obligations to others", "requires pedagogical process freedom", and "fosters agency and well-being" (Walker 2010: 159-167, see Otto and Ziegler 2010, Nussbaum 2010, Walker and Untrhalter 2007). What she terms fundamental elements of a "just education" are far more resistant to be measured than the traditional OECD indicators

Traditionally, education, and in the era of knowledge economies especially higher education, is the main channel of upward social intergenerational mobility (enables individuals to cross class boundaries between generations, see DeShano da Silva et al. 2007, Grace and Gravestock 2009, Holsinger and Jacob 2008, Saunders 2010). Education, and higher education in particular, enables intergenerational social mobility to a higher degree in more equitable societies and to a lower degree in less equitable societies. An equitable or mobile society seems to be a relational, or positional, notion: some societies are clearly

more equitable or mobile than other societies, and some clusters of countries seem to be more equitable or mobile than other clusters of countries (Attewell and Newman 2010, Bowles et al. 2005. Intergenerational social mobility reflects equality of opportunities. As defined by the OECD:

> Intergenerational social mobility refers to the relationship between the socioeconomic status of parents and the status their children will attain as adults. Put differently, mobility reflects the extent to which individuals move up (or down) the social ladder compared with their parents. A society can be deemed more or less mobile depending on whether the link between parents' and children's social status as adults is looser or tighter. In a relatively immobile society an individual's wage, education or occupation tends to be strongly related to those of his/her parents. … Indeed, in an economic sense, intergenerational social mobility is generally defined in terms of the possibility to move up (or down) the income or wage scale relative to one's parents. Such mobility is closely related to educational achievement, given the direct link between, on the one hand, human capital and, on the other hand, labour productivity (OECD 2010: 184, see also Morgan et al 2006, Mullen 2010, Svallfors 2005).[2]

2. Data and methodology

2.1. Labor market trajectories: standard descriptive statistics

The present paper is intended to link different educational trajectories to different labor market trajectories of young Europeans on the basis of empirical evidence from the EU-SILC database. First, typical transition patterns between education and labor market will be explored, including transition patterns between (different levels of) education to various labor market statuses (employment, unemployment, or inactivity in the labor market).

Next intergenerational social mobility theme will be explored in two dimensions: educational mobility and occupational mobility between generations.

[2] Unfortunately, graduates' position in national income distribution may hardly influence their position in global income distribution: as Branko Milanovic stresses, citizenship and the income class of parents explain more than 80 percent of a person's income. "One can try hard to improve one's position in a given country (provided that the country has a tolerable income mobility between the generations), but these efforts may often have a minuscule effect on one's global income position" (Milanovic 2011: 121-122).

The EU-SILC survey collects microdata on income, poverty and social exclusion at the level of households and collects information about individuals' labor market statuses and health (consequently, in the area of educational and occupational intergenerational mobility studied in this paper, the pool of respondents is limited to those only who live together with their parents in the same household). The database includes both cross-sectional data (in a given period of time) and longitudinal data (which can be followed periodically). For most countries of the pool of 26, the most recent data available come from 2007 and 2008.

Following OECD's *Employment Outlook* series, the present paper presents transitions between the three major labor market statuses through transition matrices (employment, unemployment and inactivity, or E, U, and I in the matrices that follow). In the analysis, we refer to the 15-64 age bracket, and in particular to 15-35 (referred to as "young Europeans").[3]

The descriptive analysis is based on transition matrices: the number of transitions from a given labor market status to another labor market status, as a percentage of individuals in the initial year. The transitions will be shown based on most recent data, from the initial year of 2007 to the year of 2008. Consequently, in the vertical cells in the tables there are three (departure) statuses in 2007: E, U, and I, and in the horizontal cells there are also three (arrival) statuses for 2008: E, U, and I. For instance, in the table presented below, in 2008, 93 percent of individuals who were employed in 2007 (in all 21 countries) stayed in employment, 3 percent became unemployed, and 4 percent became inactive; similarly, 35 percent of individuals unemployed in 2007 became employed in 2008, 44 percent remained unemployed, and 21 percent moved to the inactive labor market status.

Table 1. Transitions matrices between labor market statuses, all 21 countries (people aged 15- 64, in %)

Status in 2007	Status in 2008		
	employed	unemployed	inactive

[3] The 15-35 age bracket aggregates what a recent *EU Youth Report* (EC 2009) covers under four separate headings: <20, 20-24, 25-29, and 30+. For the purposes of EU-SILC dataset analysis, a more general category is much more useful because of the size of the samples in the countries studied (see EC 2009: 61).

employed	93	3	4
unemployed	35	44	21
inactive	11	4	85

Source: own study based on EU-SILC 2007 and 2008.

Some socio-economic variables were introduced in the structure of individual transitions: transitions matrices have been calculated, first, by gender and, second, by age groups (age brackets used for calculations of the 15-64 population were 15-35, 36-54, and 55-64). Transitions are also broken down by 21 countries (a parallel analysis was performed recently by Christine Erhel and Mathilde Guergoat-Larivière, although for a different set of countries and from a gender perspective, which we are not developing in the present article, see Erhel and Guergoat-Larivière, 2010).

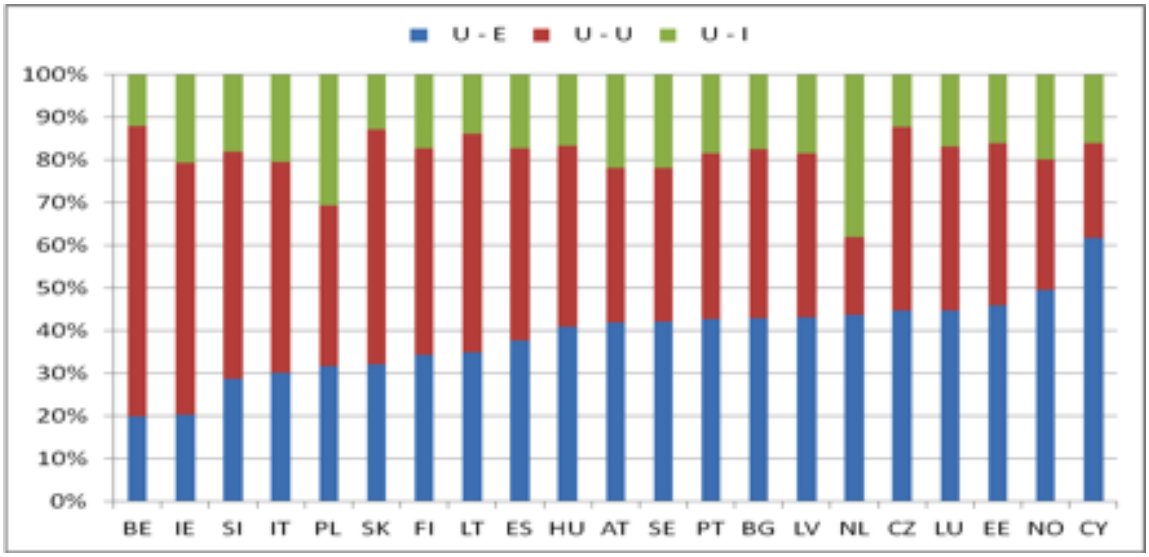
2.2. Labor market trajectories: results

Table 1 in Annex at the end of the article shows transitions between the three labor market statuses broken down by countries. What is most important for the present research is two ("positive") types of transitions: from unemployment to employment, and from inactivity to employment; in particular, for the "young Europeans" age bracket of 15-35.

The first transition of interest here is from unemployment to employment status. From a European comparative perspective, there are differences between countries with lower transitions rates between unemployment and employment (U-E transition in Chart 1 below) and those with higher transitions rates. The two countries where leaving unemployment and entering employment seems most difficult is Belgium and Ireland (both below 20%), followed by two countries with the rate below 30% (Slovenia and Italy), followed by several countries in the 30-40% range (Poland, Slovakia, Finland, Lithuania, and Spain). The majority of European countries are in the 40-50% range, with Norway in the lead (almost 50%). The Cyprus case is perhaps too small to be discussed – but the U-E transitions rate there exceeds not only 50% but also 60%, and is highest in Europe. Two Central European countries (Poland and Slovakia) have lower rates (slightly above 30%), while two other (Hungary and Czech Republic) have higher rates, above 40%. There is no common pattern for new EU member states (PL 32%, SK 32%, HU 41%, CZ 45%, SL 29%, BG 43%, no data for RO).

Similarly, the same pattern is reflected in cross-country variations in transitions rates from unemployment to unemployment (U-U), as shown in Chart 1 below: as can be expected, the countries with the highest transitions rates are Belgium and Ireland, but the lowest rate is not only in Norway but also in the Netherlands (where the level of inactivity is highest in Europe which may mean, inter alia, more people moving from unemployment to education). The details are given below. No common pattern can be shown for the cluster of new EU member states.

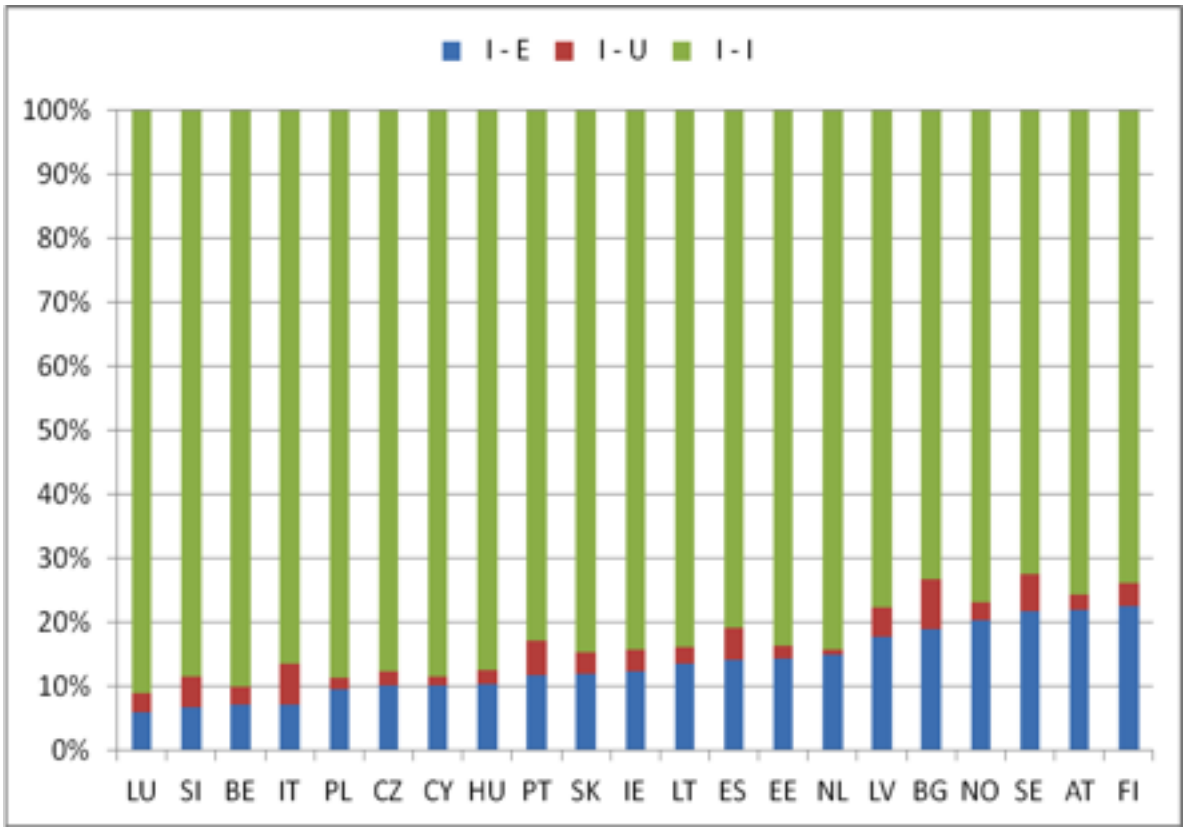
Chart 1. Transition out of unemployment, increasing order U-E (unemployment to employment), all 21 countries, 15-64 age brackets, 2008,



Source: own study based on EU-SILC 2007 and 2008

The second transition of interest here is from inactivity to employment. Transitions rates for leaving inactivity are given below, with the highest rates of transitions to employment in (more than 20%) in three Nordic countries (Norway, Sweden and Finland; data for Denmark are not available) and in Austria. The lowest rates (below 10%) are in Luxembourg (which is perhaps too small a system to draw conclusions), Slovenia, Belgium, Italy and Poland. Four Central European countries have lower transitions rates. From among new EU member states, the highest rate is in Bulgaria, almost 20% (19%), right after the Nordic leaders and Austria. The details are given below.

Chart 2. Transition out of inactivity, increasing order, I-E (inactivity to employment), all 21 countries, 15-64 age brackets 2008



Source: own study based on EU-SILC 2007 and 2008

Transitions rate from unemployment to employment (U-E) can also be broken down by age. These most important ("positive") transitions can be shown for "young Europeans" – people aged 15-35 – to explore the heterogeneity of labor market transitions of young people from a cross-country perspective. The 21 countries are shown in an increasing order, from the lowest frequency of individual transitions to the highest frequency.

Transitions rates are calculated as shares relative to individuals' previous labor market status. Individuals were asked whether they have experienced a change in their individual activity status in the last 12 months, if there was more than one change in their individual activity status, then the most recent status was recorded, according to the Eurostat.

Two further analysis are done below. The first analysis of transitions matrices is broken down by gender, the second is broken down by age.

There is a clear differentiation of transitions rates by gender. Overall transitions rates from unemployment to employment and from inactivity to employment are lower for women than for men. In a parallel manner, the probability of transforming towards inactivity (out of employment or out of unemployment) is higher for women than for men. While the overall transition rate from the unemployed to employed status (in 2007/2008, for the 15-64 age bracket) is 39% for men, it is only 31 for women (for the transition from inactivity status to employment status, it is 13% and 10%, respectively. Women are also slightly more vulnerable to lose their jobs: while 94% of men had an employment to employment transition, the same transitions rate for women was 92%. Their situation in the labor market is less favorable.

Table 2. Transition matrices between labor market statuses by gender, all 21 countries (people aged 15 – 64, %)

Status in 2008 / Status in 2007	Male			Female		
	employed	unemployed	inactive	employed	unemployed	inactive
Employed	94	3	3	92	3	6
Unemployed	39	47	15	31	41	28
Inactive	13	5	82	10	4	86

Source: own study based on EU-SILC 2007 and 2008

There are significant cross-country variations and EU-SILC makes it possible to make European comparisons; comparisons are made only for a short period of one year (2007-2008) and they do not have to be stable over time. What matters is both transitions, and levels of unemployment (or, in other words, both flows and stocks).

European countries can be differentiated according to different gender gap which is particularly important for the transition form unemployment to employment. The details (transition matrices between labor market statuses by countries and gender, people aged 15 – 64, in %) are given in Table 2 in the Annex.

The analysis of transitions matrices broken down by age is as follows. The differentiation by age is significant too. Older (55-64) workers are twice as much less likely as young (15-35) workers to have a transition from unemployment to employment. While the transitions rate

for young Europeans is 40% (that is, 40% of young unemployed find jobs within a maximum of 12 months), the same rate for the 35-54 age bracket is slightly lower (35%) and much lower for the oldest workers (19%). The overall differences in keeping employment, by age, are much less marked: the transitions rate from employment to employment is 92% for those aged 15-35, 95% for those aged 35-54 and 88% for those aged 55-64. Getting out of the inactive status to the employment status is strongly differentiated by age: while the transitions rate for young Europeans is 15%, for old Europeans it is only 4%. Younger people declare higher transition rates to employment than older age groups, or higher than the general population. Their transitions rates from employment to unemployment are higher than any other age group, so they are more likely to lose their jobs (4% for 15-35 age group, 3% for the 35-54 age group and 2% for 55-64% age group: the rate for the youngest is twice as high as the rate for the oldest workers) but also their transitions rate from unemployment to employment are higher than any other age group. So they are also more likely to find new jobs. (Inactivity in the lowest age group includes also being in education).

Again, as in the case of differentiation by gender, there are significant cross-country variations. Transition matrices between labor market statuses by age all 21 countries are given in Table 3 below and in more detail, by country, Table 3 in the Annex.

Table 3. Transition matrices between labor market statuses by age, all 21 countries (in %)

Status in 2008 / Status in 2007	15 – 35			36 - 54			55 - 64		
	employed	unemployed	inactive	Employed	unemployed	inactive	employed	unemployed	inactive
Employed	92	4	4	95	3	2	88	2	9
Unemployed	40	41	18	35	46	18	19	47	34
Inactive	15	5	79	12	5	83	4	1	94

Source: own study based on EU-SILC 2007 and 2008.

2.3. Labor market trajectories, the 4 models and their interpretation

Descriptive statistics explored above clearly show how employment and transitions patterns differ across Europe, according to age and gender. We go to the second step in which we run a logistic regression in order to assess the specific role of each determinant: binominal logits to explore the relationship between the selected socio-economic variables and transitions between non-employment (constructed as including both unemployment and inactivity) and employment. The analysis is focused on the 15-65 age bracket. The probability of moving between two states employment and non-employment is calculated and given in the Exp(B) columns (the last but one on the left), in all four models studied.

Each independent variable that includes more than two modalities is replaced by as many dummies as there are modalities. A reference category is selected for each variable: the reference country is the UK, the reference education level is the first stage of tertiary education (not leading directly to an advanced research qualification), the reference marital status is divorced and the reference health status is very bad (in Model 1 and Model 2 only) and the reference gender is female. It is possible to test how these factors influence the transitions of individuals.

In the analysis, individual labor market status was approached through two variables – the basic activity status (RB210 in Personal Register, R-File) and the "most recent change in the individual's activity status" (PL180 in Personal Data, P-File).

The transition variable between employment and non-employment is constructed using the respondent's activity status (RB210) and his/her recent status change over the last twelve months (PL180). The second variable in the cross-section survey can take 12 values that are all 12 possible transitions between employment, unemployment, retirement and "other inactivity". The cross-section database provides the main individual socio-economic indicators – of we will use here such indicators as gender, age, level of education according to ISCED classification.

The four models of transitions out of unemployment and inactivity (aggregated) are thus presented. Two classes of socio-economic variables are used: Model 1 and Model 2 include marital status and health status, Model 3 and Model 4 include only education, gender and age. Models 1 and 3 explore U-E transition and Models 2 and 4 explore E-E transition. The details on the models are given in the Appendix.

In Model 1, the dependent variable is transition from "non-working" (aggregate variable of "unemployed" and "inactive") (U) to "employed/working" (E) (success – value 1) or remain "non-working" (failure – value 0). Independent variables are the following: country, highest education level attained, marital status, self-defined health status, gender, and age. In Model 2, the dependent variable is transition from „working" to „non-working" (failure – value 0) or remain as „working" (success – value 1). Independent variables are the following: country, highest education level attained, marital status, self-defined health status, gender, age. In Model 3, the dependent variable: transition from „non-working" (U) to „working" (E) (success – value 1) or remain „non-working" (failure – value 0). Independent variables are the following: country, highest education level attained, gender, age. And in the last model, Model 4, the dependent variable is transition from „working" to „non-working" (failure – value 0) or remain as „working" (success – value 1), and independent variables are the following: country, highest education level attained, gender, age. Models 1-4, in short, are the following:

Chart 3. Four models and their transitions.

Transition	Code
U -> U	0
U -> E	1

Transition	Code
E -> U	0
E -> E	1

Transition	Code
U -> U	0
U -> E	1

Transition	Code
E -> U	0
E -> E	1

Interpretations of results obtained from the four models confirm the role of main socio-economic determinants in labor market transitions. In particular, the role of education, and especially higher education, in transitions, has an effect on the probability of making ("positive") transitions from unemployment to employment: the more educated an individual, the more likely s/he will stay in employment or move from unemployment to employment. The levels of education attained have also a strong effect on maintaining employment. Strong country variations are observed, though.

Based on Model 1, we can conclude that both differentiations by gender, age, and highest educational attainment level are important. In general, analyzing transition from non-working to working status in the labor market (viewed as "success"), the difference between men and women is very significant: men have 53.6% higher chance to move from unemployment status to employment one (odds ratio 1.536). With the increase of age by one year, the probability of success drops by 6.3% (Exp(b) 0.937). The highest chance of leaving unemployment have people with the first stage of tertiary education; for lower educational attainment levels, the chances of "success" transition are considerably lower: for pre-primary education only 26.2% compared with the reference level (Exp(B) 0.262), for primary 34%, for upper secondary education 48.5% and for post-secondary non-tertiary 73.3%. The reference category is the first stage of tertiary education.

The "success" in transitions from non-working to working status is also very highly correlated, as can be expected, with good health: persons who report their health as "very good" or "good" are 213.9% and 320.4% more likely to achieve success transition than persons with "very bad health".

The reference country for European countries was the United Kingdom, and a clear-cut country variations can be observed. In the majority of countries, the probability of achieving success (changing status from non-working to working) is higher than in the UK; it is highest in Bulgaria (208.8% higher), followed by the Netherlands (73.6% higher), and Austria (66.7% higher). In some countries, such as the Czech Republic, Ireland, Lithuania, and Latvia, the probability is roughly the same as in the UK (the b-coefficient is not significantly different from zero). In only several countries, such as Belgium (77.5%), Germany (34.1%), Italy (68%), Slovenia (50%) and Slovakia (77.7%), the probability is lower or much lower than in the UK. There is no clear pattern for a cluster of new EU member states.

Based on Model 2, we can conclude that again both differentiations by gender, age, and highest educational attainment level are important. In general, analyzing transition from working to working status in the labor market (that is, remaining in employment throughout the year, viewed as "success"), the difference between men and women is very significant: men have 52.1% higher chance to remain in employment one (odds ratio 1.521). With the increase of age by one year, the probability of success increases by 0.5% (Exp(b) 1,005). The highest chance of staying in employment have people with the first stage of tertiary education; for lower educational attainment levels, the chances of "success" transition – that is, in this model, remaining in employment – are considerably lower: for pre-primary education only 37.2% compared with the reference level (Exp(B) 0.376), for primary 37.6%, for upper secondary education 41.8% and for post-secondary non-tertiary 73.5%. The reference category is, as in Model 1, the first stage of tertiary education.

The "success" in transitions from non-working to working status is also very highly correlated, as can be expected, with good health: persons who report their health as "very good" or "good" are 213.9% and 320.4% more likely to achieve success transition than persons with "very bad health".

The reference country for European countries was the United Kingdom, and again clear-cut country variations can be observed. In the majority of countries, the probability of achieving success (changing status from working to working) is higher than in the UK; it is highest in Romania (725.6% higher), followed by several countries where the probability is

roughly 70% higher (such as Germany, 71% higher, Slovenia 69.7% higher, Slovakia 65.1% higher, Portugal 61% higher). For several other countries the probability is higher but less significantly (Italy 53.6%, Belgium 18.5%, the Czech Republic 25.4%, and the Netherlands 38.3% higher).

In some countries, such as small Cyprus and Luxembourg systems and Latvia, the probability is roughly the same as in the UK (the b-coefficient is not significantly different from zero). And in only several countries, such as Austria, Bulgaria, Spain, Ireland, Lithuania and Poland, the probability is lower or much lower than in the UK. As in Model 1, there is no clear pattern for a cluster of new EU member states. While in Romania, the chances to stay in employment are much higher than anywhere else in Europe, they are they are low in both Bulgaria and Poland. Both in the Czech Republic and in Slovakia, they are higher than in the reference country, the UK. (Analyses of Model 3 and Model 4 lead to similar conclusions and therefore we leave the details only in the Appendix).

Several reservations need to be made at this point, though, before any further generalizations could be made: transitions in employment status in particular countries, or clusters of countries, need to be referred to employment and unemployment levels, major sectors of employment, age structure of employment, as well as the impact of national labor market policies or their changes in the reference year 2007 and earlier. The transitions matrices are for one year only (2007/2008); they can be calculated for previous years (2005/2006 and 2006/2007) to see the consistency of patterns across time. But the three-years time span is still relatively short from a larger comparative perspective. Finally, the assessment of the models (via Nagelkerke's R2) shows that they explain only (maximum) about 26% of dependent variable's variability. The remaining 74% of variability is explained by other factors mentioned above.

2.4. Intergenerational social mobility: educational and occupational trajectories

Labor market trajectories of young Europeans and the intergenerational social mobility theme are closely related. Class origins in more mobile societies determine labor market trajectories to a higher degree than in less mobile societies (Archer et al. 2003, Bowles et al.

2005, Furlong and Cartmel 2009, Fuller et al. 2011, Morgan et al. 2006 and Mullen 2010). Younger generations inherit education and inherit occupations to a higher degree in less mobile societies. Young European's educational future and occupational future looks different in more and in less mobile European societies. As a conclusion from Bowles et al. book on "unequal chances", "family background" and "economic success" in the US stressed, "there are quite strong tendencies for children of those at the bottom of the income distribution to find their children at the bottom, with a parallel tendency for those at the top of the income distribution to find their children also at the top" (Bowles et al. 2005: 1).

Standard descriptive statistics based on EU-SILC analysis is given below, followed by its interpretation. The 2005 module provides data for attributes of respondents' parents during their childhood (age 14-16). The module reports the educational attainment level and the occupational status of each respondents' father and mother.

As reported by OECD, in almost all European OECD countries there is "a statistically significant probability premium of achieving tertiary education associated with coming from a higher-educated family, while there is a probability penalty associated with growing up in a lower-educated family" (Causa and Johansson, 2009b: 18).

What we present below is the assessment of the relative "risk ratio" (related to the "ratio of chance" or the "ratio of probability" in OECD analyses on intergenerational social mobility, see Causa and Johansson, 2009a and, Causa and Johansson, 2009b) of "inheriting" levels of educational attainment and "inheriting" occupations in transitions from one generation to another generations. For instance, in OECD analyses, the risk ratio of achieving tertiary education is defined as

> the ratio of two conditional probabilities. It measures the ratio between the probability of an offspring to achieve tertiary education given that her/his father had achieved tertiary education and the probability of an offspring to achieve tertiary education given that her/his father had achieved below-upper secondary education. Father's educational achievement is a proxy for parental background or wages (Causa and Johansson, 2009b: 51).

The risk ratio of achieving tertiary education is translatable into the probability premium and probability penalty of achieving tertiary education. By definitions,

> the *probability premium* is the *increase* in the probability of an offspring to achieve tertiary education given that his/her father had achieved tertiary education relative to an offspring whose father had upper-secondary education. The *probability penalty* is the *decrease* in the probability of an offspring to achieve tertiary education given that his/her father had achieved below-upper secondary education relative to an offspring whose father had upper-secondary education (Causa and Johansson, 2009b: 52).

The probability premium and the probability penalty of achieving tertiary education by an offspring can be calculated for any two different educational levels of his/her parental background.

The paper uses parallel intuitions into studying risk ratios, probability premiums and probability penalties with reference to occupational background of an offspring's father. The risk ratio shows how probable is a given attribute (here: father's education or father's occupation) to appear in offspring given that his/her father exhibits the same attribute. Thus we measure here the probability of falling into low education for those whose fathers had low education, to show variations across countries. In most of the countries studied, the correlation is strong or very strong (parents' education can be referred to as one of elements of what Edward P. St. John and colleagues term "academic capital": it is "social processes that build family knowledge of educational and career options and support navigation through educational systems and professional organizations". This type of cross-generation support is not available to most children "whose parents did not attend college, a replicating pattern in many low-income families" (St. John et al. 2011: 1).

There are four educational intergenerational social transitions analyzed below, and two occupational intergenerational transitions. The probabilities (chances) of educational transitions studied for the following cases:

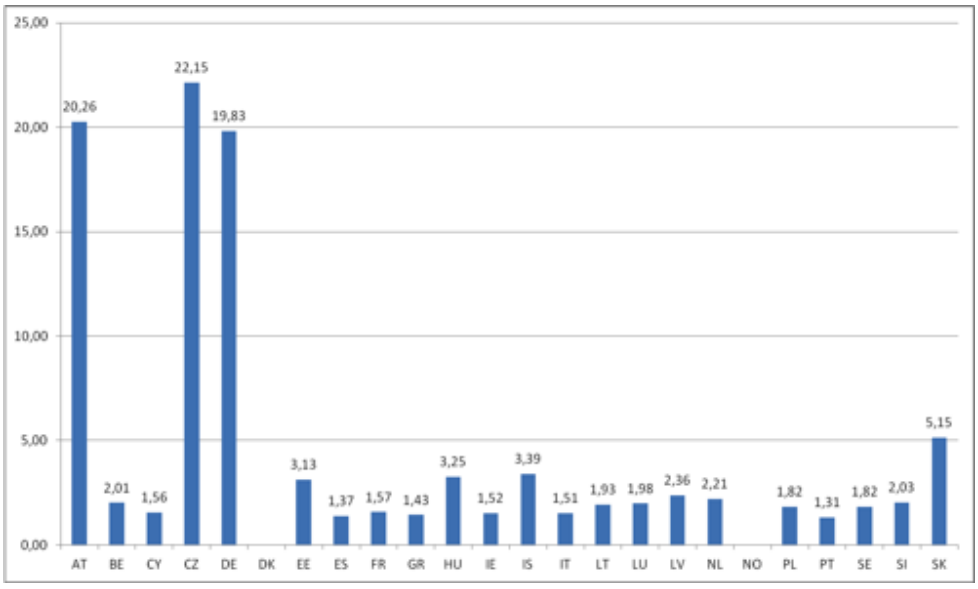
- fathers with primary education and respondents with primary education,
- fathers with tertiary education and respondents with primary education,
- fathers with primary education and respondents with tertiary education,
- fathers with tertiary education and respondents with tertiary education.

And the probabilities of occupational transitions are studied only for two cases:

- respondents with elementary occupation, in relation to their fathers' occupation (ISCO group 1 through 9)
- respondents with ISCO group I occupation (1. legislators, senior professionals, 2. professionals, and 3. technicians and associate professionals), in relation to their fathers's occupations.

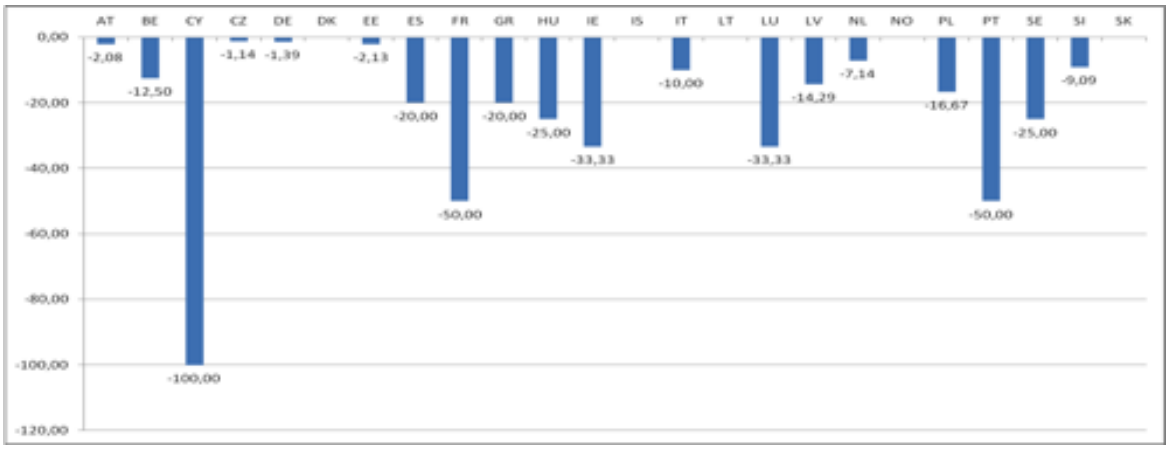
There are three European countries which markedly stand out in variations across countries. These are Austria, the Czech Republic and Germany where the probability (chance) of a person whose father's education is "primary" is about 20 times higher to have primary education than a person whose father's education is higher than primary. The probability of "inheriting" primary education in these three countries are four times higher than the next country (Slovakia, 5.15 times). All other European countries show the probability in the range of 1.3-3.6. The probability of educational intergenerational downward mobility (father: tertiary education, respondent: primary education) in Europe are very low. For instance, the probability (chance) that in France a person whose father's education was tertiary will attain education level "primary" is 50 times lower than the chance of a person whose father has attainment level lower than "tertiary" (see more details in Table 4 in Appendix).

Chart 4. Relative risk ratio for persons with primary or less education in relations to their father's primary or less education.



Source: own study based on EU-SILC 2005 poverty module

Chart 5. Relative risk ratio for persons with primary or less education in relations to their father's tertiary education



Source: own study based on EU-SILC 2005 poverty module

Chart 6. Relative risk ratio for person with tertiary education in relation to their father's primary or less education

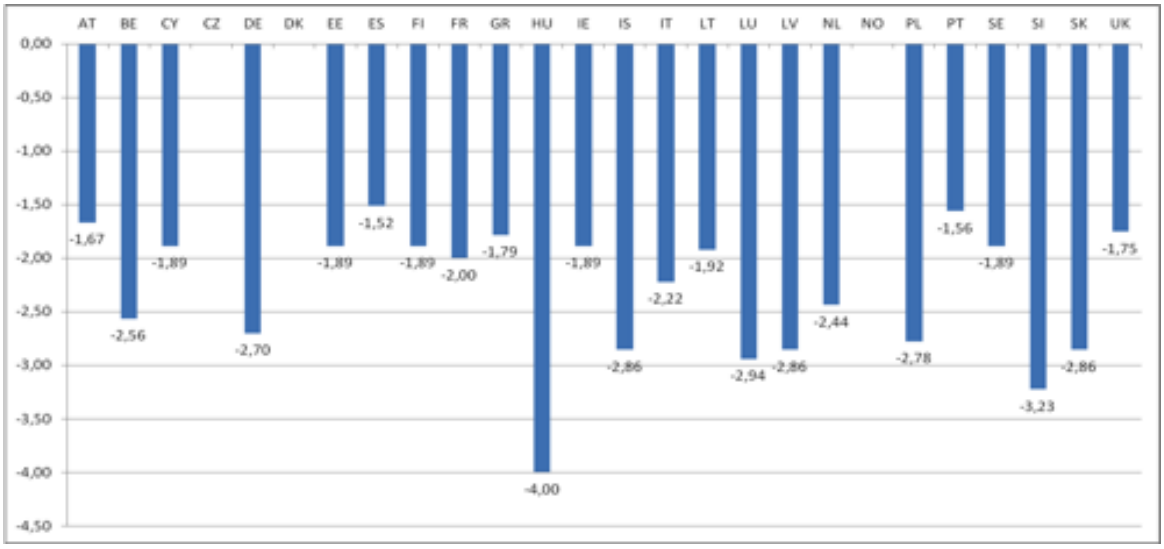
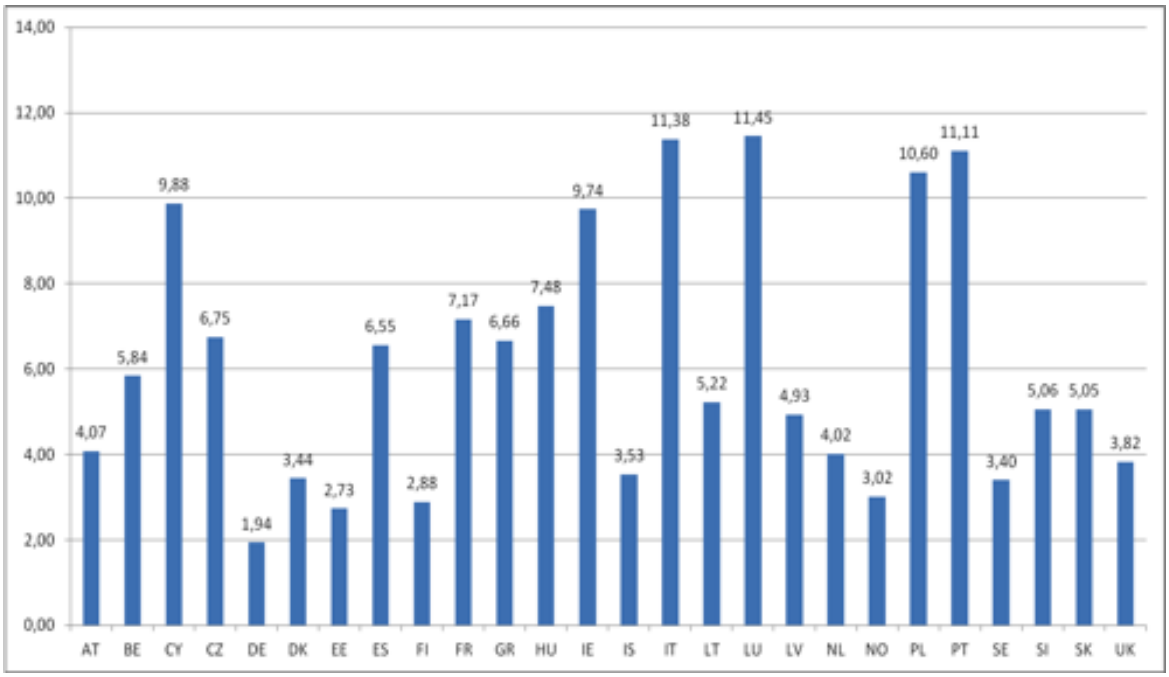


Chart 7. Relative risk ratio for person with tertiary education in relation to their father's tertiary education



Similar analyses are performed with reference to ISCO Group I occupations, in relation to fathers' occupation. The "inheritance" of occupations from two extreme groups (1 and 9) is very high throughout Europe. The details are given in Appendix in Table 7 (Relative risk ratio for person with elementary occupation in relation to their father's occupation) and Table 8 (Relative risk ratio for person with ISCO Group I occupation in relation to their father's occupation).

Thus on the basis of the 2005 module we follow the transmission of education and the transmission of occupations across generations: how parental educational and occupational background is reflected in offspring's (young Europeans') educational and occupational background. Educational status and occupational status are strong attributes carried across generations, and they are more stable than income on the one hand, and employment/unemployment/inactivity statuses on the other.

The details of country variations in intergenerational transitions are given in Appendix 1. The table presents transitions matrices across generations between educational attainment levels and occupations of parents – and educational attainment levels of offspring

(respondents). The table provides all possible transitions between four educational attainment levels (primary or below, secondary lower and upper, post-secondary non-tertiary, and tertiary) for both respondents' parents and respondents, and all possible transitions between four major groups of occupation of respondents' parents (highly skilled white-collar, low skilled white-collar, highly skilled blue-collar and low skilled blue-collar) and respondents' educational attainment levels.

The paper uses ISCO-88 Basic occupational groups (nine major groups) and, following recent EUROSTUDENT IV study (2011), applies the following hierarchy of workers:

- *highly-skilled white-collar* (1. legislators, senior professionals, 2. professionals, and 3. technicians and associate professionals)
- *low-skilled white-collar* (4. clerks, 5. service workers and shop and market sales workers)
- *highly skilled blue-collar* (6. skilled agriculture and fishery workers, 7. craft and related trades workers)
- *low skilled blue-collar* (8. plant and machine operators and assemblers, 9. elementary occupations).

Below, in following charts, we have been especially interested in transitions between extreme categories: primary or below and tertiary education levels, and highly skilled white-collar and low skilled blue-collar workers. The Table in Annex 1 shows all possible combinations, though, for all countries studied in the 2005 EU-SILC module.

Chart 8. Transition from parents' primary education to respondent's tertiary education

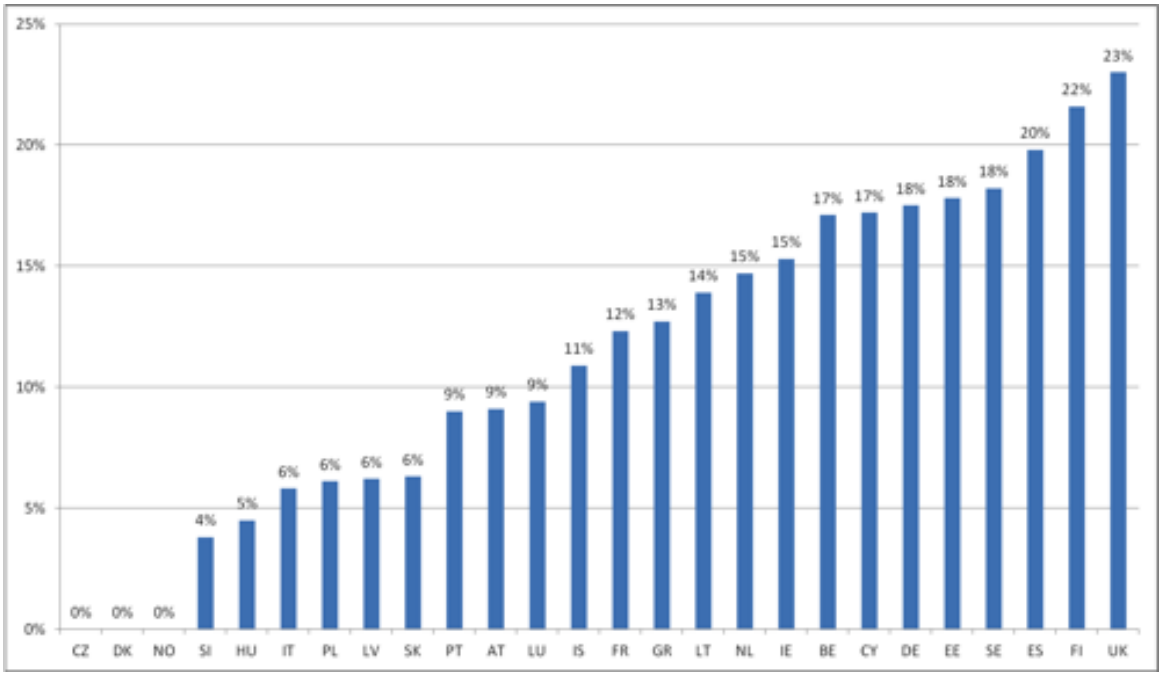


Chart 8 above shows the probability of respondent's achieving tertiary education given that his/her parental level of education was primary. In more mobile societies, the probability will be higher; in societies in which intergenerational mobility is lower, the probability will be lower. The country variations are significant, and there is a major divide between a cluster of countries which include former communist countries (Slovenia, Hungary, Poland, Latvia, and Slovakia, as well as Italy) in which the mobility is very low, and the probability is in the range of 4-6%, and Nordic countries (Finland and Sweden, data for Denmark and Norway not available), Belgium Germany, Estonia (in the Nordic tradition), Spain and the UK in which the mobility is 3-4 times higher, and the probability of a "generational leap" between generations is 3-4 times higher, in the range of 17-23%). Other countries are in the middle. The most mobile society in Europe is the UK in which the probability is 23%. The probability of upward intergenerational mobility through education clearly separates new EU member states from other European countries.

Surprisingly, and against the conventional knowledge that the expansion of private higher education opens up larger segments of society, there is no difference between Hungary and Slovakia (where private higher education enrollments are low) and Poland (where they are highest in Europe, reaching 33% in 2010). One of the conclusions is that

intergenerational mobility is a long-term process, and postponed (by 1-2 decades) massification of higher education in postcommunist countries is not yet reflected in empirical data. On the other hand, massified systems in the Nordic countries or in the UK are powerful mechanisms of upward social mobility.

Chart 9. Transition from parents' tertiary education to respondent's primary education

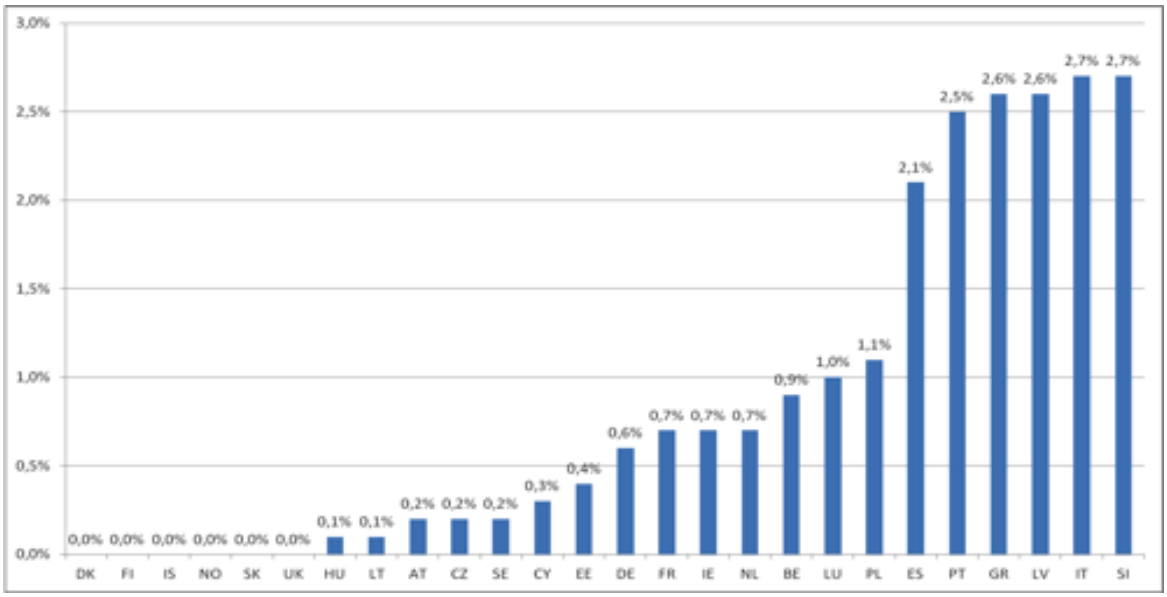


Chart 9 above shows the downward intergenerational social mobility: it is low for all countries. The highest probability in Europe (2.5-2.7% only) is in Portugal, Greece, Latvia, Italy and Slovenia but no clear clusters of countries can be shown. Certainly, the best guarantee not to have primary education is to be coming from well-educated families. The transition pattern is extremely strong among all countries studied.

Charts 10 and 11 below explore social mobility from a different perspective: the rigidity of educational backgrounds across generations. That is, the "inheritance" of primary education across generations, and the inheritance of tertiary education across generations. While the general patterns can be expected, the country variations in Europe are very significant. Overall, in all 26 European countries studied (except Slovenia), the chance of a respondent whose parents have tertiary education attainment level to have tertiary education attainment level is more than 50%. The range of 50-60% dominates in new EU member states (the Czech Republic, Slovakia, Latvia, Estonia, and Hungary, as well as in

Denmark, Austria, Norway, Germany and Sweden). The top range (70-79%) is shown only for Spain, Ireland, and Belgium, as well as two small systems of Luxembourg and Cyprus. From this perspective, the best chances to "inherit" higher education is in the latter countries. All other countries are in the middle (the 60-79% range). Chart 4 shows that the highest probability of inheriting primary education form one's parents (over 30%) are in Ireland, Slovenia, and the three Southern European countries of Spain, Greece, and Portugal (for Italy it is 25%). Certainly the lowest chances to inherit primary education, or, alternatively, to move upwards on an educational ladder (although not necessarily to the highest step, tertiary education) are in new EU member states (1-7% range): Slovakia, Lithuania, the Czech Republic and Hungary; for Poland it is 26%). It may mean that mobility in education occurs gradually and by steps: while in these countries the probability to reach tertiary education level are low, at the same time the probability to go beyond primary education are very high.

Charts 12, 13 and 14 explore the occupational transitions between generations. Again strong country variations can be shown, and compared with country variations based on educational transitions across generations.

Chart 10. Transition from parents' primary education to respondent's primary education

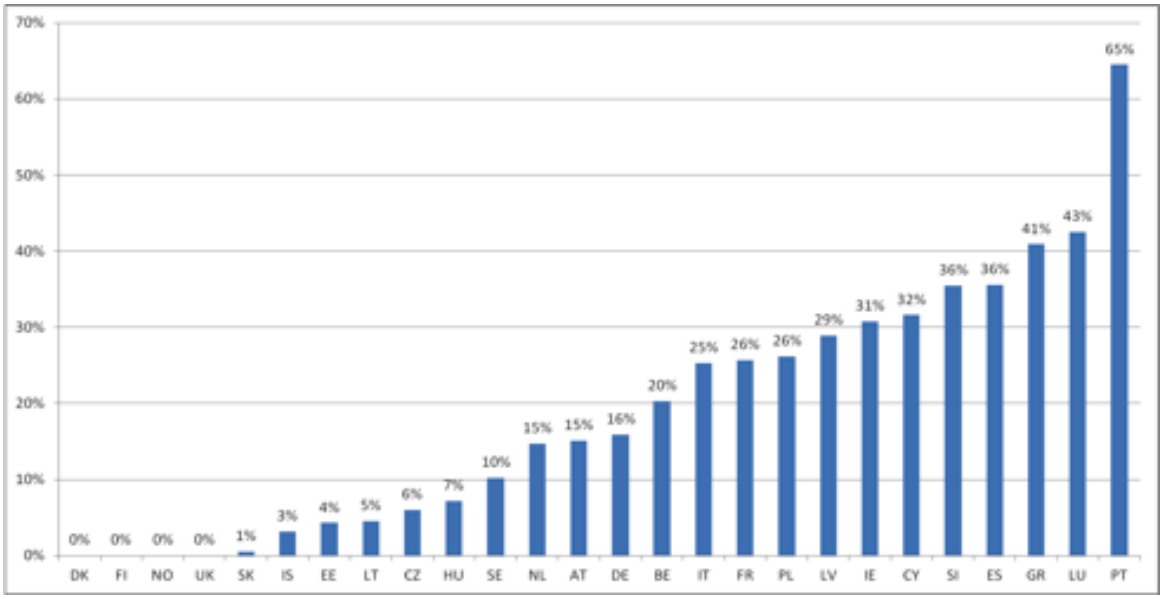
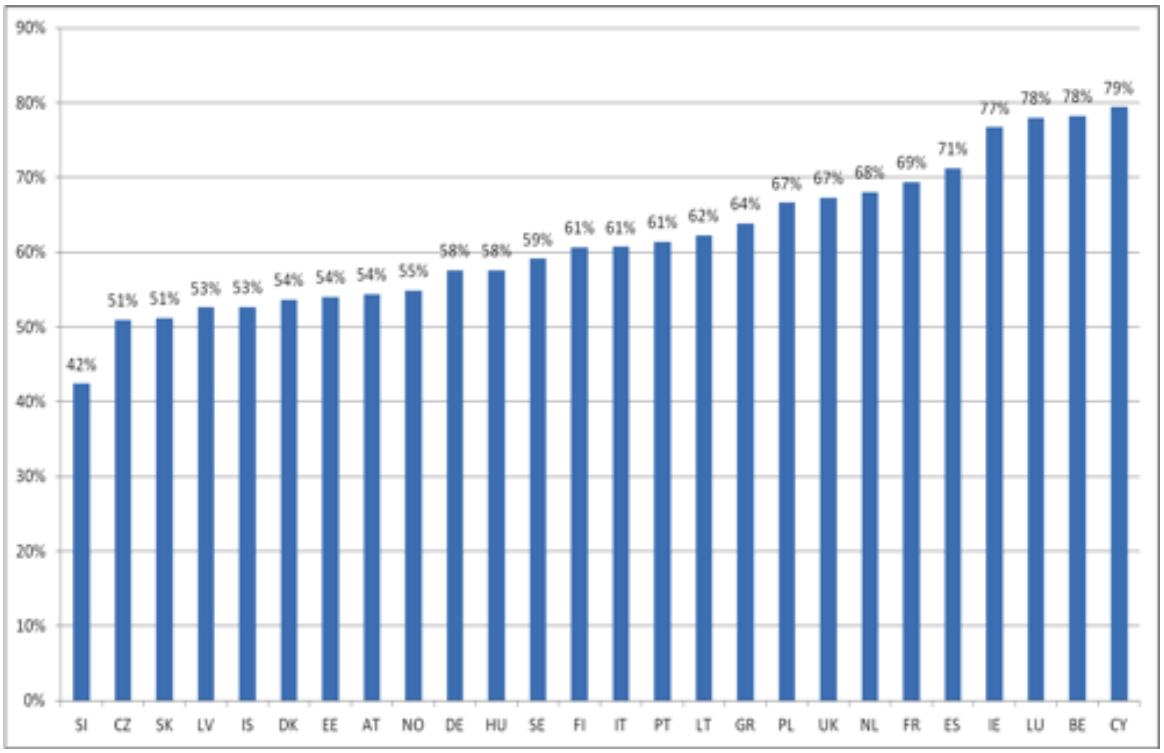


Chart 11. Transition from parents' tertiary education to respondent's tertiary education



Source: own study based on EU-SILC 2005 poverty module

Chart 12. Transition from parents' tertiary education to respondent's highly skilled white-collar occupation

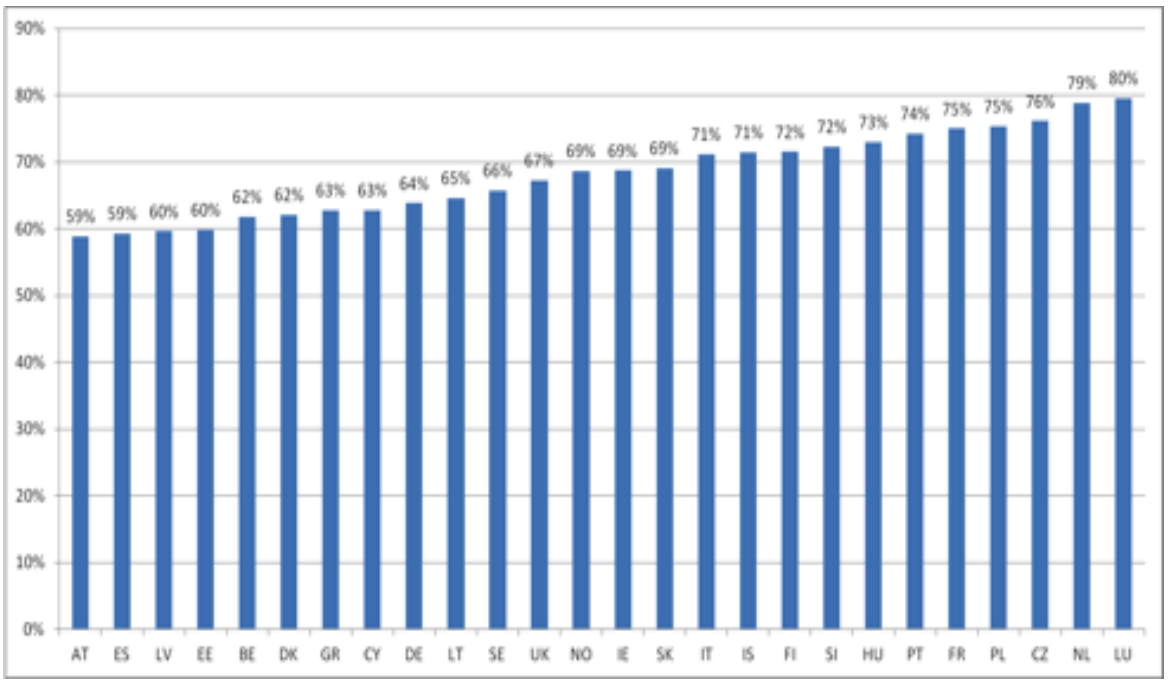


Chart 13. Transition from parents' highly skilled white-collar occupation to respondent's same job position

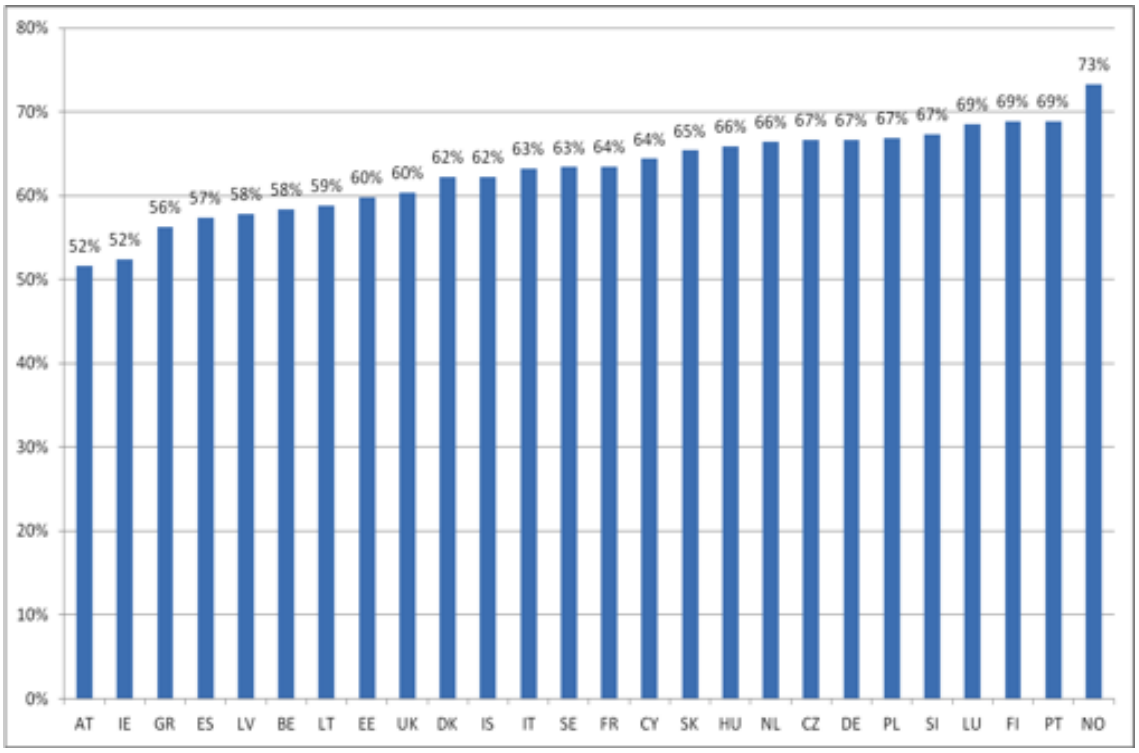
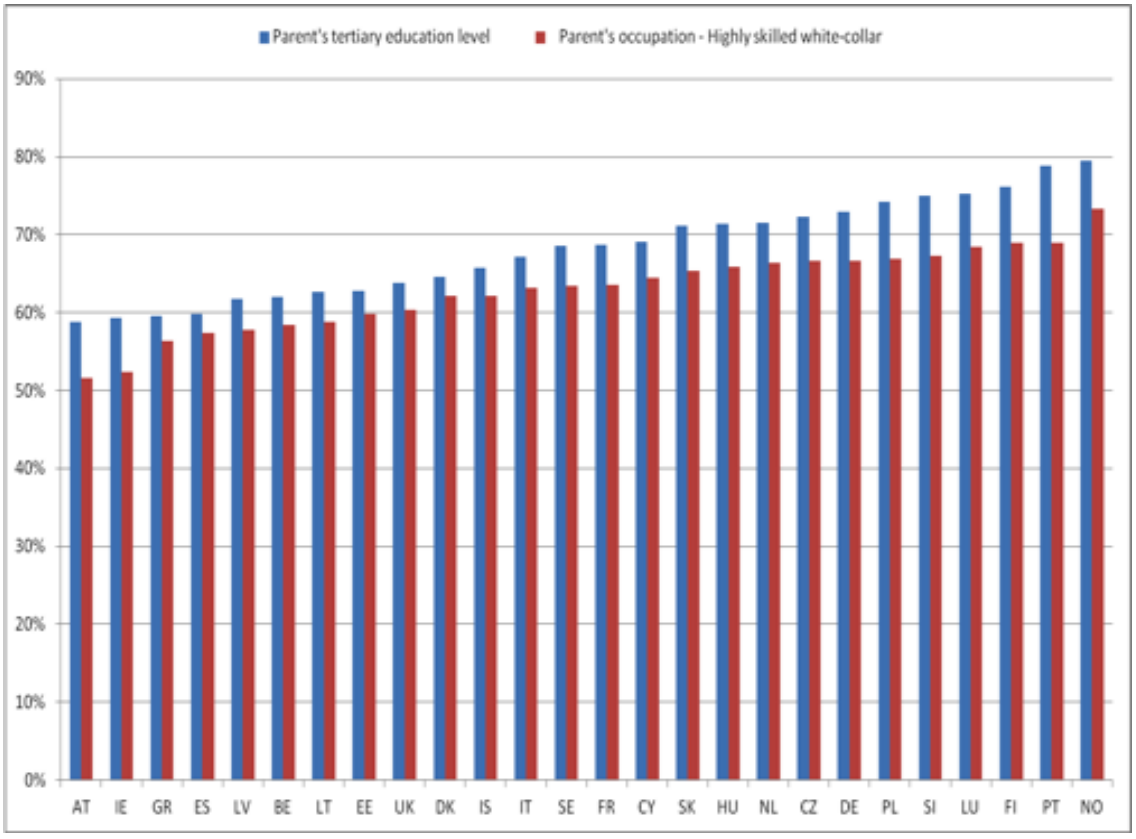


Chart 14. Comparison of transitions from parents' highly skilled white-collar occupation and tertiary education to respondent's same job position



3. Conclusions

3.1. Wider discussions: educational expansion and the role of educational credentials in the labor market, or a limit to benefits from higher education?

In the overall majority of higher education systems and labor market systems in Europe, higher educational credentials lead to "better jobs" (see Holzer et al. 2011 on "where are all the good jobs going" in the US) and better life chances. Nevertheless, from a theoretical perspective of "positional goods", developed for the first time in the 1970s by a British economist, Fred Hirsch (1976), there is always "social congestion": the number of good jobs (for instance, prestigious white-collar jobs leading to high incomes, or to stable middle-class lifestyles) in a labor market system is always limited, and top jobs in a given system will always be limited, no matter how well-educated the workforce is. The division of economy in particular EU member states into major sectors (e.g. manufacturing, services, agriculture in OECD categories, or into major nine occupations, and "professionals" and all others in a UN terminology in particular) and its changes over time should be an important point of references in all "new skills for new jobs" (EC 2009) theoretical exercises linking growth in jobs requiring high skills with growth in students numbers. Educational expansion in labor markets already saturated with higher education graduates has certainly different consequences than educational expansion in labor market which are still far away from a state of saturation (the best example being monetary rewards from higher education in such clusters of countries as Central Europe on the one hand and the Nordic countries on the other. On average, CEE countries have considerably less educated labor force, so – one can assume – rewards from higher education are higher. Non-monetary rewards include, for instance, low levels of unemployment for higher education graduates, and relatively faster transitions from unemployment to employment, as EU-SILC data demonstrate.

Also any research, including present research based on EU-SILC microdata, should be cognizant of the potential limit to individual benefits from higher education attainment level as an individual shield against unemployment, or an individual life strategy inevitably leading to traditional middle-class lifestyles. From the theoretical perspective in which higher education credentials are "positional goods", while collective, or public, benefits from educational expansion are increasing (as reported e.g. by the OECD indicators discussed

above), individual, or private, benefits from educational expansion, as viewed e.g. through the proxy of wage premium on higher education, do not have to be increasing. In some European systems, as reported by OECD, the wage premium has been consistently high, and increasing, on a global scale, in the last decade. These are postcommunist Central European economies, such as Poland, the Czech Republic, Slovakia and Hungary. In other systems, where educational expansion has started (much) earlier, the wage premium is much lower, and stable or decreasing (for instance, in the Nordic countries). There are several interrelated explanations but one of them is the "positional goods" argument according to which the advantage of higher education credentials in the labor market is relative, or positional: if collective efforts of ever-increasing numbers of young people are focused in the same direction, individual gains from individually rational life strategies do not lead to expected results (Brown and Lauder, 1994, 2011; Hirsch 1976).

The EU-SILC dataset, the major but not exclusive source of empirical evidence for the present research, offers the possibility of a study of inequality of educational outcomes and of the relevant coefficients: contrasting those young Europeans whose father (and/or mother) had tertiary education credentials with those whose father (and/or mother) had compulsory education credentials or less.

In more equitable national educational regimes, not only educational trajectories of young Europeans with different social backgrounds will be more similar – but also their labor market trajectories will be more similar. By contrast, in less equitable national educational regimes, both educational and labor market trajectories of young Europeans with different social backgrounds will be markedly different. In short, the chances of young Europeans from lower socio-economic strata to attain higher education will be closer to the chances of young Europeans from higher socio-economic strata in more equitable systems and in more equitable societies. Intergenerational social mobility Alternatively, higher education will be less "inherited", that is, less dependent on parents' (father's or mother's or both's) education in more equitable societies.

Two questions need to be separated. One question is about labor-market trajectories of young Europeans (aged 15-35, for the purposes of the present research, see EC 2009: 61). Another question is how labor-market trajectories are determined by social circumstances, and family background in particular. In relatively more equitable (just, fair, open, mobile etc.) systems, the role of social background is less important than in relatively less equitable (just, fair, open, mobile etc.) systems. (There are long-standing discussions in social sciences what social "justice" and "fairness" in access to higher education are, and what "openness" of higher education which leads to higher "intergenerational social mobility" is, which I am disregarding here at the moment, see e.g. Craig et al. 2008, Haydon 2010, Holsinger and Jacob 2008, Furlong and Cartmel 2009, Dorling 2010, Duke and Layer 1005). Consequently, EU-SILC data allow to study both the "inheritance" of education and the "inheritance" of occupations: occupations will be less "inherited", that is, less dependent on parents' (father's or mother's or both's) occupations in more equitable societies. Clear cross-country differences can be shown based on EU-SILC data, and clusters of countries can be identified.

At the same time, while labor market trajectories refer to the employed/unemployed/inactive (E/U/I) statuses in the labor market, they can also refer to actual roles played in the labor market in the case of the employment status: both the types of occupation (one of 9 in ISCO-88 basic occupational groups) and its changes over time, linked to levels of wages, and their changes over time, could be studied – which leave for another occasion, though.

Different lifetime additional earnings depending on the highest level of education attained by individuals, consistently reported for the OECD area, do not only refer to higher education degree taken (from the arts and humanities at the bottom end and medicine at the top end of the spectrum) but also to open or closed access to occupations and professions based on social and economic strata of origin (including different labor market aspirations and values and beliefs originating also from social environment in the pre-HE periods of study). Consequently, while lifetime additional earnings refer to levels of education attained, EU-SILC data provide clues about intergenerational mobility both in terms of educational levels of respondents and their parents and in terms of occupations of respondents and their parents.

For research on intergenerational educational and occupational mobility, most useful is EU-SILC 2005 module on “The intergenerational transmission of poverty” (to be repeated by Eurostat in 2012).

The theoretical underpinning of present research is grounded in the idea that higher education credentials, in the times of massification, should be increasingly viewed as (Fred Hirsch’s) “positional goods”: they increase the chances of better labor market trajectories only to a certain point of saturation behind which they become a must, a starting point in competition between individuals holding it, rather than a clear competitive advantage. As “social congestion” increases, their role as signaling mechanisms (about abilities of graduates) is changing: as in Hirsch’s memorable metaphor, standing on tiptoe does not help to get a better view if all others around also stand on tiptoes. At the same time, not having higher education credentials, like not standing on tiptoes, is a serious drawback in the labor market. So credentials are sought by ever-increasing share of young Europeans, even though their economic value may be, in many systems and increasingly so, questioned. Stable or increasing participation rates in higher education mean bigger share of populations with higher education credentials.

As OECD data for the last decade show, higher education attainment for the population aged 25-64 have been increasing throughout the OECD area in the 1997-2009 period, with the OECD average annual growth rate of 3.7 percent, and with the EU-21 average annual growth rate of 3.9 percent.

It is interesting to show how levels of educational attainment among 25-64 year-olds have evolved from 1997 to 2009. Average annual growth in the proportion of those with a tertiary education has exceeded 5% in four European countries: Ireland, Luxembourg, Poland and Portugal. The proportion of the population that had not attained upper secondary education decreased by 5% or more per year in five European countries: Hungary, Luxembourg, the Netherlands, Poland and the Slovak Republic. Most of the changes in educational attainment have occurred at the low and high ends of the skill distribution, largely because older workers with low levels of education are moving out of the labour force and as a result of the expansion of higher education in many countries in recent years.

As OECD *Education at a Glance 2011* explains, this expansion has generally been met by an even more rapid shift in the demand for skills in most OECD countries: the demand side can be explored in labour-market indicators on employment and unemployment, earnings, incentives to invest in education, labour costs and net income, and transition from school to work, all covered in this OECD volume (OECD 2011).

What works on an individual basis, and especially before the level for massification or universalization of higher education is reached, does not seem to work from a larger social perspective: individual efforts may be largely lost if all young people undertake the same efforts, as the efforts finally may not lead to increasing individual life chances. The pool of "good jobs" seems to restricted in Europe, as elsewhere, and the idea that higher education is always leading to middle-class lifestyles and standards of living may be increasingly misleading.

Both in the US and in Europe the standard of living of young people is threatened to be lower than the standard of living of their parents, especially for those from the middle classes (see Robert Frank on "*Falling Behind. How rising inequality is harming the middle classes*", 2007). The "positional goods" perspective needs to be born in mind in any cross-country research based on the EU-SILC data (the perspective is represented by Fred Hirsch and Robert Frank from among labor economists, and Phillip Brown and Hugh Lauder from among sociologists of education).

The initial hypothesis of the present research was that in those European countries where higher education has been more expanded, there is **more equality** in achieving higher education by social background – but there are also accompanying **diminishing occupational and wage returns** to higher education. OECD data do not suffice to research the interrelations between the two and they can be strengthened by the empirical evidence derived from EU-SILC.

EU-SILC dataset provides new opportunities for Europe-wide mapping of inequality based on both the cross-country analysis, especially on the basis of the 2005 module on "The intergenerational transmission of poverty". Any similar study cannot be performed for an OECD area as a whole at the moment.

The present research studied intergenerational social mobility among young Europeans (viewed in EU-SILC through the proxy parents' educational background and parents' occupational background; and viewed in EUROSTUDENT IV additionally through the proxy of self-assessment of students regarding their parents' social standing; also viewed through the proxy of "having financial difficulties" question combined with "always" or "most of the time" in the EU-SILC 2005 module) from two perspectives. The first perspective was related to equitable access to higher education, and the second was related to labour market trajectories. Labour market trajectories of young Europeans (25-35 years old) were studied, with particular reference to their highest educational attainment levels (low vs. high, or below secondary education vs. higher education) and their social background, both educational and occupational.

3.2. Directions for further research

Current research shows at least three major directions for further research. One research direction is linking higher education with labor market trajectories through academic fields of study, with additional lifetime earnings different for different academic degrees viewed horizontally rather than vertically. The difference between following labor market trajectories by educational levels and by fields of study within the same educational level (e.g. at the bachelors and masters levels in different fields of study) is significant. The second research direction is a combination of insights from EU-SILC dataset and from two large-scale European datasets about European university graduates and about European professionals, as studied through surveys in twelve European countries in the 2000s, CHEERS and REFLEX. And the third research direction is a study of lifelong learning.

Thus the first task for future research is linking higher education with the labor market and labor market trajectories (including transitions between employment, unemployment and inactivity) through academic fields of study. Not only the status of being employed/unemployed/inactive in the labor market is linked to the level of education (which EU-SILC data clearly show) – but the labor market status and its transitions are also substantially linked to fields of study. The national average wage premium on higher education, or private internal rate of return (IRR) in higher education, or other related indicators measured over the years by OECD, do not show the difference between fields of studies. So far, this dimension has not been systematically explored, mostly due to the lack of European data in a comparable format. And average additional lifetime earnings are substantially different for different degrees, as various national or global labor market studies show (e.g. PricewaterhouseCoopers global study on salaries related to fields of studies from 2007). While overall average additional lifetime earnings seem substantial in most countries, it is very low or almost zero for graduates in such fields of study as arts or humanities in many systems.

Exploring labor market trajectories of young Europeans from an equity perspective may mean not only linking their labor market trajectories with educational trajectories. It may also increasingly mean linking them with fields of study taken, and consequently degrees obtained and used in the labor market. The initial hypothesis is that the socio-economic background of students and graduates may be positively correlated with fields of study taken: the SES quartiles of origin may be a determining factor for the choice of fields of study, from those generally least demanding and least competitive (and leading to the lowest financial rewards in the labor market) to those generally most demanding and most competitive.

Researching labor market consequences of studying different fields seems fundamental to linking higher education to the labor market successes and failures (changing employment status and changing occupational status over time) both in individual EU member states and in Europe. The research literature analyzing the impact of the specific field of study (and its importance for social stratification studies) on occupational prestige, job mismatches, employment status and income is growing (see Reimer, Noelke, and Kucel 2008). As they

argue, “with increasing numbers of university graduates in the labor market, the signal value of a university degree from less-academically challenging and less selective fields like the humanities and social sciences will deteriorate” (2008: 234). This is an important additional dimension of studies linking higher education to labor markets and labor market trajectories, and levels of educational attainment by field of study with wage premium on higher education by field of study. Unfortunately, EU-SILC dataset does not allow to explore the issue – but it can be approached via the analyses of Labour Force Survey. EU-SILC data can be combined with the European Social Survey (ESS) data 2002-2008 to further explore the issue of linking educational outcomes and occupational outcomes with social background (see ideas developed recently by Bernardi and Ballarino 2010).

At the same time, this is the line of research which can go hand in hand, in empirical terms, with a more fundamental, theoretical issue raised recently by Martha Nussabaum in her *Not For Profit. Why Democracy Needs Humanities* (2010): that our being in the midst of a “crisis of massive proportions and grave global significance” means a “worldwide crisis in education”. In practical terms – the humanities and the arts (as fields of study) being cut away from curricula and are losing their place “in the minds and hearts of parents and children” (Nussbaum 2010: 2). Any research into fields of study should refer to this alarming, global phenomenon. The fate of graduates from those fields in the labor market, from a European comparative perspective, might shed new light on the phenomenon analyzed so far mostly in the American context of liberal education gradually losing its ground. What Reimer, Noelke, and Kucel suggest (2008: 234) is that with the increasing numbers of university graduates in tge labor market, “the signal value of a university degree from less academically challenging and less selective fields like the humanities and social sciences will deteriorate”.

The second research direction is to study of labor market trajectories of young Europeans based on EU-SILC dataset in combination with other datasets currently available about university graduates and professionals (and can be informed by theoretical underpinning of two large-scale, European comparative research projects of the 2000s – CHEERS and REXLEX, surveys of higher education graduates in Europe (CHEERS) and survey of professionals in Europe (REFLEX), with large theoretical output resulting from both

projects. CHEERS studied about 40.000 questionnaires from graduates in 11 European countries and Japan on their socio-biographical background, study paths, transitions from higher education to employment, early career, links between study and employment, job satisfaction and their retrospective view on higher education, coordinated by Ulrich Teichler from Kassel University, analyzed in *Careers of University Graduates. Views and Experiences in Comparative Perspectives* and *Higher Education and Graduate Employment. Results from Graduate Surveys from Twelve Countries*, Teichler 2007 and Schomburg and Teichler 2006. REFLEX studied demands that the modern knowledge society places on higher education graduates and the degree to which higher education equips graduates with the competencies to meet these demands, based on 70.000 surveys of higher education graduates in fifteen European countries and Japan, analyzed in *The Flexible Professional in the Knowledge Society: New Challenges for Higher Education,* coordinated by Jim Allen and Rolf van der Velden of Maastrich University, Allen and van der Velden, 2011).

The higher education exit point is as important as the higher education entry point in current research, so that both students and graduates already in the labor market are studied. Various types of education/labor market mismatches can be studied, based on classification of the mismatches developed in Allen and van der Velden (2011), drawn from the REFLEX research output.

And the third research direction is to review the determinants of inequality in workers' lifelong learning (LLL) opportunities on the basis of EU-SILC. The probability of undertaking lifelong learning (adult learning) can be studied for each and every EU country, and a European comparative study can be performed directed at LLL incidence, as self-reported by respondents. The participation in LLL, and its intensity, is an important dimension of different labor market trajectories of young Europeans, and clusters of countries can be identified on the basis of high/average/low LLL participation – which can be explored through socio-economic strata of origin of young Europeans. The impact of class origins on LLL participation can be explored although it is unclear whether any links can be shown and whether the equity perspective employed can lead to any statistically significant results. Such dimensions as age, sex, attainment levels, working full- or part-time and type of occupation can be researched too, showing national variations. EU-SILC data can be

combined with such data sources as IALS (*The International Adult Literacy Survey*), LFS (*EU Labor Force Survey*), *The European Working Conditions Survey* and the *Continuous Vocational Training Survey,* as well as OECD aggregate data (see Biagetti and Scicchitano 2009). Lifelong learning is of critical importance for the success of the Europe 2020 strategy, and its role increases with ongoing work in Europe on both National Qualifications Framework and European Qualifications Framework (EQF) which link all levels of (and all routes to) education in EU countries.

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Annex:

Table 1. Transition matrices between labor market statuses, by countries (people aged 15 – 64, in %)

Country	Status in 2007	Status in 2008		
		employed	unemployed	inactive
AT	employed	92	2	6
	unemployed	42	36	22
	inactive	22	2	76
BE	employed	95	2	3
	unemployed	20	68	12
	inactive	7	3	90
BG	employed	90	6	4
	unemployed	43	40	18
	inactive	19	8	73
CY	employed	96	2	2
	unemployed	62	22	16
	inactive	10	1	89
CZ	employed	95	2	4
	unemployed	45	43	12
	inactive	10	2	88
EE	employed	93	3	5
	unemployed	46	38	16
	inactive	14	2	84
ES	employed	91	6	3
	unemployed	38	45	17
	inactive	14	5	81
FI	employed	92	2	6
	unemployed	34	48	17
	inactive	22	4	74
HU	employed	91	3	6
	unemployed	41	42	17
	inactive	10	2	88
IE	employed	91	4	5
	unemployed	20	59	21
	inactive	12	3	84
IT	employed	94	3	4
	unemployed	30	50	20
	inactive	7	7	87
LT	employed	94	3	3
	unemployed	35	51	14
	inactive	14	3	84
LU	employed	94	2	4

	unemployed	45	38	17
	inactive	6	3	91
LV	employed	90	5	5
	unemployed	43	38	19
	inactive	18	5	78
NL	employed	96	1	4
	unemployed	44	18	38
	inactive	15	1	84
NO	employed	94	1	5
	unemployed	50	31	20
	inactive	20	3	77
PL	employed	94	2	4
	unemployed	32	38	31
	inactive	9	2	89
PT	employed	93	3	3
	unemployed	43	39	19
	inactive	12	6	83
SE	employed	94	2	3
	unemployed	42	36	22
	inactive	22	6	73
SI	employed	95	3	2
	unemployed	29	53	18
	inactive	7	5	88
SK	employed	96	2	2
	unemployed	32	55	13
	inactive	12	3	85

Source: own study based on EU-SILC 2007 and 2008

Table 2. Transition matrices between labor market statuses by countries and gender (people aged 15 – 64, in %)

Country	Status in 2008 / Status in 2007	Male			Female		
		employed	unemployed	inactive	employed	unemployed	inactive
AT	employed	93	2	4	89	3	8
	unemployed	44	39	18	40	34	27
	inactive	24	3	73	21	2	77
BE	employed	96	2	3	94	2	3
	unemployed	20	69	11	20	68	13
	inactive	8	3	89	6	3	91
BG	employed	91	6	3	89	7	5
	unemployed	56	34	11	32	44	23
	inactive	26	7	67	13	9	78

CY	Employed	97	2	2	94	3	3
	Unemployed	61	26	14	62	20	18
	Inactive	10	1	89	10	2	88
CZ	Employed	97	1	2	93	2	5
	Unemployed	43	47	10	46	40	14
	Inactive	10	2	88	10	2	88
EE	Employed	93	4	3	92	1	6
	Unemployed	46	45	9	46	18	37
	Inactive	13	3	84	15	2	84
ES	Employed	92	6	2	88	6	6
	Unemployed	37	49	14	38	35	26
	Inactive	15	5	80	13	5	82
FI	Employed	93	2	5	90	2	8
	Unemployed	31	57	12	38	37	25
	Inactive	18	6	76	25	2	72
HU	Employed	92	3	5	90	2	8
	Unemployed	41	45	14	41	39	19
	Inactive	10	2	88	10	2	87
IE	Employed	92	5	3	90	2	8
	Unemployed	19	62	19	25	51	24
	Inactive	14	7	79	11	2	87
IT	Employed	95	2	3	91	3	6
	unemployed	33	56	12	27	43	30
	inactive	10	9	81	5	6	89
LT	employed	94	3	3	93	3	4
	unemployed	40	49	11	27	55	18
	inactive	12	4	85	15	2	83
LU	employed	95	2	3	93	2	5
	unemployed	46	42	12	44	36	20
	inactive	5	1	94	6	4	90
LV	employed	90	5	4	91	4	6
	unemployed	44	37	19	42	40	18
	inactive	14	3	83	20	6	75
NL	employed	98	0	2	94	1	6
	unemployed	44	13	43	43	24	33
	inactive	16	1	83	15	1	85
NO	employed	95	2	3	92	1	7
	unemployed	46	30	24	53	31	16
	inactive	21	3	77	20	3	77
PL	employed	96	2	2	92	3	5
	unemployed	40	39	21	25	37	38
	inactive	10	2	88	9	2	89
PT	employed	95	3	2	92	4	4
	unemployed	50	38	12	36	39	25
	inactive	13	6	81	11	5	84

SE	employed	95	2	3	94	3	4
	unemployed	39	42	20	45	31	24
	inactive	21	8	72	23	4	73
SI	employed	96	3	2	95	3	3
	unemployed	29	55	15	28	52	20
	inactive	8	5	88	6	5	89
SK	employed	97	1	2	95	2	3
	unemployed	39	52	9	27	57	16
	inactive	15	3	82	10	4	87

Source: own study based on EU-SILC 2007 and 2008.

Table 3. Transition matrices between labor market statuses by country and age (in %)

Country	Status in 2008 / Status in 2007	15 - 35			36 - 54			55 – 64		
		employed	unemployed	inactive	employed	unemployed	inactive	employed	unemployed	Inactive
AT	employed	90	2	8	95	3	2	80	2	19
	unemployed	63	27	11	43	40	16	9	41	50
	inactive	33	3	65	28	4	67	5	1	94
BE	employed	95	3	2	97	1	2	85	3	13
	unemployed	32	64	4	22	66	12	5	75	21
	inactive	10	3	88	8	6	87	2	2	97
BG	employed	88	7	5	93	6	1	82	6	12
	unemployed	45	33	22	46	45	9	32	44	25
	inactive	21	10	69	23	11	66	15	5	80
CY	employed	96	2	2	97	2	1	91	3	6
	Unemployed	65	24	12	63	22	15	42	16	42
	inactive	13	2	86	12	2	86	2	0	98
CZ	employed	94	2	4	98	2	1	89	2	9
	unemployed	51	39	10	46	47	7	21	45	34
	inactive	13	3	84	19	2	79	2	1	97
EE	employed	90	2	8	95	3	2	94	1	5
	unemployed	66	24	10	35	49	17	24	47	29
	inactive	16	2	82	20	4	77	5	1	94
ES	employed	90	8	2	93	5	2	88	5	7
	unemployed	49	38	13	36	51	13	16	48	36
	inactive	19	5	76	13	7	80	6	4	91
FI	employed	87	1	12	95	2	3	91	4	5
	unemployed	46	31	23	38	54	8	16	60	24

	inactive	25	4	71	39	3	58	4	4	92
HU	employed	90	4	6	95	2	3	77	3	20
	unemployed	48	39	13	39	47	14	17	38	45
	inactive	12	2	86	15	4	81	5	1	94
IE	employed	86	6	8	96	2	2	88	4	8
	unemployed	25	58	17	10	62	29	28	56	16
	inactive	18	5	77	10	1	89	4	3	94
IT	employed	92	4	4	96	2	2	87	1	12
	unemployed	30	52	19	34	46	20	15	47	37
	inactive	9	11	80	8	7	85	3	1	96
LT	employed	91	5	4	96	3	2	91	2	8
	unemployed	43	42	15	37	55	9	18	56	27
	inactive	15	2	83	18	3	79	5	4	91
LU	employed	95	4	1	97	1	2	81	2	17
	unemployed	60	30	10	36	43	21	10	56	34
	inactive	8	5	87	8	4	89	1	0	99
LV	Employed	88	5	7	92	5	3	90	2	8
	Unemployed	50	29	20	41	43	16	36	42	22
	inactive	20	4	76	23	10	67	8	2	89
NL	Employed	95	1	4	98	1	2	92	0	8
	Unemployed	61	11	28	50	16	34	14	30	56
	inactive	21	1	78	17	0	83	5	1	94
NO	Employed	89	3	9	97	1	2	93	1	6
	Unemployed	53	27	20	54	29	17	31	43	27
	inactive	24	4	72	22	3	76	8	1	92
PL	Employed	93	3	4	95	2	3	90	1	9
	Unemployed	38	34	28	29	41	30	22	36	42
	inactive	14	3	83	8	2	90	3	0	97
PT	Employed	93	5	3	95	3	2	90	2	8

	Unemployed	56	30	14	42	41	17	22	47	31
	inactive	15	8	78	14	6	80	5	2	93
SE	employed	90	3	7	97	2	1	94	2	4
	unemployed	46	33	20	43	39	19	33	37	30
	inactive	26	7	68	27	9	64	8	1	92
SI	employed	95	4	1	97	2	1	85	4	12
	unemployed	45	41	14	23	61	16	9	58	33
	inactive	10	4	86	12	16	72	1	3	97
SK	employed	95	3	2	98	1	1	93	0	7
	unemployed	36	51	13	32	59	9	19	56	25
	inactive	16	5	80	19	6	76	4	0	96

Source: own study based on EU-SILC 2007 and 2008

Table 4. Models 1-4.

Model 1.

Dependent variable: transition from "non-working" (aggregate variable of "unemployed" and "inactive") (U) to "employed/working" (E) (success – value 1) or remain "non-working" (failure – value 0).

Transition	Code
U -> U	0
U -> E	1

Independent variables: country, highest education level attained, marital status, self-defined health status, gender, and age.

Results and brief interpretation (the last column)

Categories	B	standard error	p-value	Exp(B)	"Odds ratio" interpretation
Male	0.429	0.022	<0.001	1.536	If one is 'male', one has 53.6% more chance to achieve "success" than female
age (continuous variable)	-0.065	0.001	<0.001	0.937	With the increase of age by one year, the probability of success drops by 6.3%
pre-primary education	-1.338	0.157	<0.001	0.262	If one has "pre-primary education", one has 26.2% as much chance of success as person with 'first stage of tertiary education'
primary education	-1.079	0.04	<0.001	0.34	See above
lower secondary education	-1.552	0.035	<0.001	0.212	See above
(upper) secondary education	-0.724	0.03	<0.001	0.485	See above
post-secondary non tertiary education	-0.324	0.058	<0.001	0.723	See above
Never married	-1.672	0.054	<0.001	0.188	one has 18.8% as much chance of success as divorced person
Married	-0.502	0.047	<0.001	0.605	one has 60.5% as much chance of success as divorced person

Separated	**-0.128**	**0.103**	**0.214**	**0.88**	The b-coefficient is not significantly different from zero, one the same chance of success as divorced person
Widowed	-1.035	0.078	<0.001	0.355	one has 35.5% as much chance of success as divorced person
very good	1.144	0.125	<0.001	3.139	one is 213.9% more likely to achieve success than a person with very bad health
good	1.436	0.123	<0.001	4.204	See above
fair	1.251	0.124	<0.001	3.493	See above
bad	0.553	0.13	<0.001	1.739	See above
AT	0.511	0.068	<0.001	1.667	The citizen of that country is 66.7% more likely to achieve success than the citizen of the UK
BE	-0.255	0.074	0.001	0.775	See above
BG	0.403	0.071	<0.001	1.497	See above
CY	0.461	0.071	<0.001	1.586	See above
CZ	**-0.114**	**0.066**	**0.086**	**0.892**	The b-coefficient is not significantly different from zero, the citizen of that country has the same probability to achieve success as the citizen of the UK
DE	-1.077	0.072	<0.001	0.341	
EE	0.336	0.074	<0.001	1.4	
ES	0.272	0.06	<0.001	1.313	
IE	**0.075**	**0.074**	**0.313**	**1.078**	The b-coefficient is not significantly different from zero
IT	-0.386	0.06	<0.001	0.68	The citizen of that country has 68% as much chance of success as the citizen of the UK
LT	**0.094**	**0.08**	**0.241**	**1.099**	The b-coefficient is not significantly different from zero
LU	0.245	0.076	0.001	1.277	
LV	**-0.001**	**0.077**	**0.991**	**0.999**	The b-coefficient is not significantly different from zero
NL	0.551	0.074	<0.001	1.736	
PL	0.26	0.057	<0.001	1.297	

PT	1.127	0.071	<0.001	3.088	The citizen of that country is 208.8% more likely to achieve success than the citizen of the UK
RO	**-18.582**	**403.017**	**0.963**	**0**	The b-coefficient is not significantly different from zero
SI	-0.685	0.094	<0.001	0.504	The citizen of that country has 50.4% as much chance of success as the citizen of the UK
SK	-0.252	0.071	<0.001	0.777	The citizen of that country has 77.7% as much chance of success as the citizen of the UK
Intercept	0.906	0.15	<0.001	2.474	Not interpretable

(Technical explanations: Column B contains estimated logistic regression coefficients. The value above zero means that the particular category (or variable) positively influence the probability of success. The values below zero influence this probability negatively. If the B – coefficient equals zero, it means a particular category (or variable) does not influence the success probability at all.

'Standard error' column contains the values of standard error. This error is calculated for each B-coefficient and it is interpreted as the average deviation from the arithmetical mean. The error is calculated because of the sample character of data. It is also used to calculate the significance of obtained B-coefficients.

P-value is the probability of obtaining a test statistic at least as extreme as the one that was actually observed, assuming that the null hypothesis is true. One often "rejects the null hypothesis" when the p-value is less than the significance level, in this case, α=0.05. When the null hypothesis is rejected, the result is said to be statistically significant. The hypothesis tested in this case is that the B-coefficient equals zero (the particular category do not influence the success probability). If p-value is greater than 0,05 – one failed to reject the null hypothesis.

Exp(B) contains the values of the so called “odds ratio”. For qualitative variables, it is interpreted as a percentage of chance of success comparing to the reference category. For quantitative variables, it is interpreted as a percentage of chance of success when the value increase by one.

Each of the qualitative variables was recoded into k-1 (where k is the number of categories in the variable) dummy variables. The category for which dummy variable was not created is so called reference category. All the logistic regression results for particular variable’s categories are compared to the reference category.

Dummy variable is a dichotomous variable with value of 1 if the unit is characterized by the category, and 0 otherwise).

Variable	Reference category
Country	UK
education	first stage of tertiary education (not leading directly to an advanced research qualification)
marital status	Divorced
health	very bad
gender	Female

Assessment of the quality of the model fit:

Statistics	Value	Interpretation
-2 log-likelihood	65766.72	For the ideal model, the value is 0. The higher the value is, the worse.
Nagelkerke’s R^2	0.257	The model explains only 25.7% of dependent variable’s variability. 74.3% of variability is explained by other, unknown factors.

Model 2.

Dependent variable: transition from „working” to „non-working” (failure – value 0) or remain as „working” (success – value 1)

Transition	Code
E -> U	0
E -> E	1

Independent variables: country, highest education level attained, marital status, self-defined health status, gender, age.

Results (the interpretation is analogical to the previous model).

Categories	B	standard error	p-value	Exp(B)
Male	0.419	0.022	<0.001	1.521
age (continuous variable)	0.005	0.001	<0.001	1.005
pre-primary education	-0.989	0.219	<0.001	0.372
primary education	-0.977	0.044	<0.001	0.376
lower secondary education	-0.872	0.036	<0.001	0.418
(upper) secondary education	-0.445	0.03	<0.001	0.641
post-secondary non tertiary education	-0.308	0.056	<0.001	0.735
Never married	-0.402	0.048	<0.001	0.669
Married	0.123	0.044	0.005	1.131
Separated	**0.043**	**0.092**	**0.643**	**1.043**
Widowed	-0.197	0.073	0.007	0.821
very good	1.978	0.101	<0.001	7.225
Good	1.93	0.098	<0.001	6.89
Fair	1.586	0.099	<0.001	4.886
Bad	0.747	0.104	<0.001	2.111
AT	-0.544	0.065	<0.001	0.58
BE	0.17	0.076	0.025	1.185
BG	-0.177	0.073	0.015	0.838
CY	**0.076**	**0.083**	**0.363**	**1.079**
CZ	0.226	0.067	0.001	1.254
DE	0.536	0.069	<0.001	1.71
EE	-0.34	0.069	<0.001	0.712
ES	-0.358	0.057	<0.001	0.699
IE	-0.472	0.07	<0.001	0.624
IT	0.429	0.059	<0.001	1.536
LT	-0.302	0.076	<0.001	0.739
LU	**-0.101**	**0.076**	**0.186**	**0.904**
LV	**-0.073**	**0.069**	**0.289**	**0.929**
NL	0.324	0.079	<0.001	1.383
PL	-0.306	0.058	<0.001	0.737
PT	0.476	0.08	<0.001	1.61
RO	1.982	0.124	<0.001	7.256
SI	0.529	0.088	<0.001	1.697
SK	0.501	0.077	<0.001	1.651
Intercept	0.909	0.132	<0.001	2.482

Variable	Reference category
country	UK
Education	first stage of tertiary education (not leading directly to an advanced research qualification)
marital status	Divorced
health	very bad
gender	Female

Assessment of quality of model fit:

Statistics	Value	Interpretation
-2 log-likelihood	68550,66	For the ideal model, the value is 0. The higher the value is, the worse.
Nagelkerke's R^2	0,077	The model explains only 7,7% of dependent variable's variability. 92,3% of variability is explained by other, unknown factors.

Model 3.

Dependent variable: transition from „non-working" (U) to „working" (E) (success – value 1) or remain „non-working" (failure – value 0).

Transition	Code
U -> U	0
U -> E	1

Independent variables: country, highest education level attained, gender, age

Results

Category	B	Standard error	p-value	Exp(B)
Male	0.221	0.02	0	1.247
age	-0.046	0.001	0	0.955
pre-primary education	-1.712	0.152	0	0.18
primary education	-1.216	0.039	0	0.297
lower secondary education	-1.671	0.034	0	0.188
(upper) secondary education	-0.764	0.028	0	0.466
post-secondary non tertiary education	-0.267	0.056	0	0.766
AT	0.534	0.067	0	1.705
BE	-0.244	0.074	0.001	0.784
BG	0.409	0.07	0	1.505
CY	0,388	0,07	0	1,474
CZ	-0,159	0,063	0,012	0,853
DE	-1,031	0,072	0	0,357

EE	0,215	0,069	0,002	1,24
ES	0,312	0,059	0	1,366
IE	0,019	0,074	0,794	1,019
IT	-0.378	0.059	0	0.686
LT	0.051	0.073	0.48	1.053
LU	0.327	0.075	0	1.387
LV	-0.006	0.075	0.936	0.994
NL	0.571	0.073	0	1.769
PL	0.245	0.056	0	1.278
PT	1.092	0.07	0	2.98
RO	-18.547	410.438	0.964	0
SI	-0.711	0.065	0	0.491
SK	-0.354	0.07	0	0.702
Intercept	0.489	0.06	0	1.63

Variable	**Reference category**
country	UK
education	first stage of tertiary education (not leading directly to an advanced research qualification)
gender	Female

Statistics	Value	Interpretation
-2 log-likelihood	73015.123	For the ideal model, the value is 0. The higher the value is, the worse.
Nagelkerke's R^2	0,219	The model explains only 21,9% of dependent variable's variability. 92,3% of variability is explained by other, unknown factors.

Model 4.

Dependent variable: transition from „working" to „non-working" (failure – value 0) or remain as „working" (success – value 1)

Transition	**Code**
E -> U	0
E -> E	1

Independent variables: country, highest education level attained, gender, age

Results

Category	B	Standard error	Wald	df	Istotność	Exp(B)
Male	0.425	0.021	423.544	1	0	1.529
age	0.008	0.001	82.023	1	0	1.008
pre-primary education	-1.196	0.215	30.81	1	0	0.302
primary education	-1.138	0.042	722.26	1	0	0.321
lower secondary education	-0.978	0.034	810.361	1	0	0.376
(upper) secondary education	-0.488	0.029	278.99	1	0	0.614
post-secondary non tertiary education	-0.322	0.055	34.466	1	0	0.725
AT	-0.589	0.064	84.573	1	0	0.555
BE	0.146	0.075	3.759	1	0.053	1.157
BG	-0.194	0.072	7.218	1	0.007	0.824
CY	0.133	0.083	2.61	1	0.106	1.143
CZ	0.207	0.064	10.426	1	0.001	1.23
DE	0.478	0.068	49.212	1	0	1.613
EE	-0.501	0.065	59.459	1	0	0.606
ES	-0.361	0.056	41.89	1	0	0.697
IE	-0.445	0.07	40.72	1	0	0.641
IT	0.388	0.058	44.783	1	0	1.475
LT	-0.425	0.07	36.435	1	0	0.654
LU	-0.112	0.075	2.19	1	0.139	0.894
LV	-0.305	0.067	20.618	1	0	0.737
NL	0.297	0.078	14.432	1	0	1.345
PL	-0.357	0.056	40.39	1	0	0.7
PT	0.355	0.079	20.38	1	0	1.426
RO	2.009	0.124	262.505	1	0	7.458
SI	0.359	0.064	31.639	1	0	1.433
SK	0.424	0.076	31.37	1	0	1.528
Intercept	2.629	0.065	1618.801	1	0	13.862

Variable	**Reference category**
country	UK
education	first stage of tertiary education (not leading directly to an advanced research qualification)
gender	Female

Statistics	Value	Interpretation
-2 log-likelihood	74430.933	For the ideal model. the value is 0. The higher the value is. the worse.
Nagelkerke's R^2	0.054	The model explains only 5.4% of dependent variable's variability. 92.3% of variability is explained by other. unknown factors.

Table 5. Relative risk ratio for persons with primary or less education in relations to their father's education

Country	Father's education		
	Primary or below	Secondary (lower and upper) and post-secondary non-tertriary	Tertiary
AT	20.26	-1.01	-2.08
BE	2.01	-3.70	-12.50
CY	1.56	-14.29	-100.00
CZ	22.15	-1.23	-1.14
DE	19.83	-2.50	-1.39
DK		1.17	
EE	3.13	-2.17	-2.13
ES	1.37	-7.69	-20.00
FR	1.57	-3.85	-50.00
GR	1.43	-5.00	-20.00
HU	3.25	-3.45	-25.00
IE	1.52	-10.00	-33.33
IS	3.39	-2.94	
IT	1.51	-6.25	-10.00
LT	1.93	-3.70	
LU	1.98	-3.45	-33.33
LV	2.36	-1.23	-14.29
NL	2.21	-1.89	-7.14
NO		1.26	
PL	1.82	-3.70	-16.67
PT	1.31	-20.00	-50.00
SE	1.82	-3.23	-25.00
SI	2.03	-2.56	-9.09
SK	5.15	-1.85	

Source: own study based on EU-SILC 2005 poverty module

Table 6. Relative risk ratio for person with tertiary education in relation to their father's education

Country	Father's education		
	Primary or below	Secondary (lower and upper) and post-secondary non-tertriary	Tertiary
AT	-1.67	-1.10	4.07
BE	-2.56	1.41	5.84
CY	-1.89	2.23	9.88
CZ		-1.37	6.75
DE	-2.70	-1.39	1.94
DK		-1.30	3.44
EE	-1.89	-1.14	2.73
ES	-1.52	2.05	6.55
FI	-1.89	1.01	2.88
FR	-2.00	1.71	7.17
GR	-1.79	2.35	6.66
HU	-4.00	-1.10	7.48
IE	-1.89	2.29	9.74
IS	-2.86	-1.00	3.53
IT	-2.22	2.00	11.38
LT	-1.92	1.13	5.22
LU	-2.94	1.41	11.45
LV	-2.86	-1.12	4.93
NL	-2.44	1.03	4.02
NO		-1.37	3.02
PL	-2.78	1.51	10.60
PT	-1.56	4.96	11.11
SE	-1.89	1.27	3.40
SI	-3.23	1.50	5.06
SK	-2.86	-1.16	5.05
UK	-1.75	1.30	3.82

Source: own study based on EU-SILC 2005 poverty module

Table 7. Relative risk ratio for person with elementary occupation in relation to their father's occupation

Country	Father's occupation								
	1. LE	2. PR	3. TE	4. CL	5. SE	6. AG	7. CR	8. PL	9. EL
AT	-1.23	-2.94	-1.96	-2.63	-1.12	1.22	-1.43	-1.09	2.45
BE	-2.08	-3.33	-2.63	-2.22	-1.43	-1.37	1.16	1.45	3.10
CY	-2.56	-6.25	-4.76	-3.85	-1.79	1.67	-1.19	-1.11	1.77
CZ	-1.89	-14.29	-3.03	-2.86	-1.30	1.51	1.01	1.20	3.06
DE	-1.47	-2.27	-1.30	-1.69	-1.23	1.60	1.07	1.56	2.03
DK	-1.61	-4.17	-1.54	-1.45	-1.35	1.25	-1.05	1.77	1.83
EE	-1.64	-2.86	1.08	-1.25	-1.39	1.27	-1.00	1.02	1.95
ES	-2.33	-4.55	-2.22	-2.50	-1.61	1.20	-1.33	-1.47	2.47
FI	-2.63	-1.82	-1.25	-1.69	1.16	1.21	1.15	-1.00	1.87
FR	-1.41	-4.00	-2.08	-2.56	-1.19	1.36	1.10	1.13	2.09
GR	-2.17	-2.63	-1.89	-1.47	1.31	1.04	-1.05	1.20	2.23
HU	-2.94	-9.09	-4.76	-2.00	-1.19	1.76	-1.14	-1.04	2.34
IE	-1.54	-1.85	-1.45	-2.04	-2.22	1.86	1.06	1.17	2.10
IS	-1.32	-5.56	-1.96		1.52	1.46	1.12	1.41	1.45
IT	-2.22	-1.67	-2.78	-2.08	-1.28	1.37	-1.10	-1.22	2.39
LT	-2.50	-3.57	-2.78	-1.23	-1.04	1.15	-1.15	1.05	1.63
LU	-2.04	-20.00	-2.44	-5.00	-1.10	1.83	1.38	1.31	1.65
LV	-1.47	-2.08	-1.79	-2.78	1.40	1.44	-1.27	-1.09	2.04
NL	-1.30	-10.00	-1.82	1.10	-1.08	1.49	1.17	1.91	2.43
NO	-4.35	-2.70	-1.30	-1.89	2.08	1.81	-1.01	1.53	-1.10
PL	-2.08	-7.14	-2.50	-1.92	-1.64	1.11	1.03	1.03	2.11
PT	-3.57	-3.70	-3.13	-2.04	-1.67	1.16	-1.02	-1.18	2.35
SE		-3.45	1.13		1.61	2.33	1.07	-1.23	4.91
SI	-4.55	-3.03	-1.72	-1.22	-2.38	1.45	-1.00	1.08	1.78
SK	-3.03	-2.63	-3.03	-1.61	1.04	1.31	-1.16	-1.09	2.16
UK	-2.63	-4.00	-1.82	-2.00	1.08	2.49	1.26	1.52	1.73

Source: own study based on EU-SILC 2005 poverty module

Table 8. Relative risk ratio for person with ISCO Group I occupation in relation to their father's occupation

Country	Father's occupation								
	1. LE	2. PR	3. TE	4. CL	5. SE	6. AG	7. CR	8. PL	9. EL
AT	3.36	2.33	1.24	1.15	-1.18	-2.08	-1.37	-1.72	-1.43
BE	2.59	1.29	-1.41	-1.14	-1.67	-1.00	-1.37	-1.30	-1.89
CY	4.21	2.58	1.47	1.18	1.33	-1.75	-1.11	-1.14	-1.61
CZ	2.30	2.41	1.39	1.60	-1.41	-1.12	-1.52	-1.45	-1.23
DE	1.64	1.23	1.15	1.10	-1.18	-1.10	-1.16	-1.32	-2.00
DK	1.98	-1.15	1.20	1.02	1.16	-1.45	-1.19	-1.85	-1.04
EE	1.60	1.41	1.72	-1.27	-6.25	-2.44	-1.18	-1.09	-1.54
ES	4.12	1.13	1.21	-1.00	-1.32	-1.22	-1.47	-1.35	-1.52
FI	2.12	1.35	1.06	-1.01	1.09	-1.33	-1.05	-1.28	-1.79
FR	2.09	1.69	1.49	-1.30	-1.28	-1.89	-1.03	-1.64	-1.52
GR	2.38	-1.08	-1.15	-1.32	-1.19	-1.22	-1.16	-1.08	-1.22
HU	2.38	2.14	1.68	1.45	1.44	-1.75	-1.18	-1.27	-2.22
IE	1.61	1.04	2.17	-1.09	-1.08	-5.26	-1.37	-1.23	-2.04
IS	1.42	1.08	1.19	1.14	-1.64	-1.59	-1.00	-1.05	1.24
IT	2.83	-1.37	-1.10	-1.59	-1.06	-1.18	-1.28	-1.27	-1.15
LT	3.00	1.93	1.61	1.52	1.13	-1.85	-1.11	-1.45	-1.52
LU	3.26	1.79	-1.12	-1.67	1.04	-1.14	-1.69	-1.54	1.03
LV	1.24	2.23	1.22	1.06	1.83	1.04	-1.11	-1.23	-1.43
NL	1.56	-1.19	-1.09	1.03	-1.01	-1.00	-1.56	-1.23	-1.00
NO	1.77	-1.23	-1.03	1.14	-1.01	-1.54	-1.06	-1.15	1.02
PL	3.32	2.10	1.30	1.34	1.07	-1.67	-1.00	-1.25	-1.49
PT	2.58	1.58	1.02	-1.52	1.31	-1.28	-1.20	-1.43	-1.00
SE	3.44	1.07	-1.64	1.77	-2.13	1.70	-2.22	-1.69	1.34
SI	2.36	2.03	2.27	-1.08	1.67	-1.69	-1.09	-1.85	-2.38
SK	1.86	1.62	1.28	1.31	-2.22	-1.67	-1.18	-1.27	-1.02
UK	1.71	-1.14	1.25	1.31	1.07	-1.75	-1.56	-1.23	-1.59

Source: own study based on EU-SILC 2005 poverty module

B. Effects of scarring on transitions of young people in the UK

Robert Raeside, Ronald McQuaid
with Valerie Egdell, Emma Hollywood and Helen Graham

1. Introduction

The current economic crisis has resulted in high unemployment for young people compared to older groups across Europe (ILO, 2011). In October 2011 the youth unemployment rate was 22% in the EU-27 with rates of over 45% observed in Spain and Greece (Eurostat, 2012). Periods of unemployment in particular may blight the future of young people in terms of their future labour market outcomes, such as the likelihood of further unemployment, lower pay, lower job quality and reduced wellbeing – so called 'scarring' effects (Bell and Blanchflower 2010; Dieckhoff, 2011; Gregg and Tominey, 2005; Lockwood, 1991). There is considerable research on the effects of each of these, but little literature considering all three together.

Periods of unemployment when a person is young have a significant effect on pay (Gregory and Jukes, 2001), especially for the low skilled (Burgess et al., 2003; Gregg and Tominey, 2005). For example in Australia, Watson (2008) found that the length of unemployment and gender were associated with 'scaring' as reduced wages potential was especially lowered for those people experiencing relatively long-term unemployment and for men. However, Arulampalam (2001) found that while unemployment has a wage scar effect and the first spell is the most damaging, duration is not important and redundancy is less scarring than other types. Unemployment when young may also be linked to future lower occupations than otherwise or downward mobility (Layte et al., 2000; Gangl, 2004).

In terms of the likelihood of being unemployed, Perkins and Scutella (2008) found that prior employment status was the most powerful effect on current employment status, so those who were previous unemployed were more likely to be currently unemployed than other groups. It is not only being unemployed that affects these factors, but also the length that someone is unemployed. People who had been unemployed for a longer term also were less likely to return to employment than those who recently were in work (Blanchard and Diamond, 1994; McQuaid, 2006), but this may be particularly pronounced for those with

limited work experience to begin with, such as young workers, with a small minority becoming persistently unemployed (Gregg, 2001).

In contrast to the pay impacts on males, Luijkx and Wolbers (2009) found both genders were affected by scarring in terms of future unemployment, although the duration was greater for men, while Bönheim and Taylor (2002) previous unemployment was associated with later jobs having a shorter tenure and involuntary separations then being smaller for women than men. However, Stewart (2007), using a random effects model, concluded that it is difficult to disentangle the various effects and the impact of low-wage jobs is statistically indistinguishable from the impact of unemployment on future prospects. Finally, the social networks of young workers has been found to be closely tied to finding employment (Granovetter, 1982; Holzer, 1988; Lindsay et al., 2005), so contacts with others, especially 'weak links' rather than close family ties are important, as they provide information not readily available and are also associated with higher wellbeing.

Unemployment while young also has important affects on health and wellbeing (Fergusson et al., 2001; Hammarström and Janlert 2002; Hammarström et al., 1988), including influencing psychiatric illness during young adulthood (Fergusson et al., 1997) and psychological health and smoking (Reine et al., 2004) as well as general satisfaction with life. The length of time being unemployed is also important in reducing wellbeing (Clark et al., 2001). Fergusson et al. (1997) found that as the duration of unemployment increased, there were significant tendencies for rates of major depression, anxiety disorders, conduct disorders, substance use disorders and attempted suicide. While the increased relationships between unemployment and psychiatric were mainly explained by social, family and personal factors that existed before the young person left school, those subject to unemployment had higher rates of substance use and anxiety disorder.

Other factors affect future labour market outcomes and life chances. For instance, pay potential may be affected through damaged or decayed skills reducing the level of human capital (Pissarides, 1992; Heckman, et al., 2006). Non-cognitive skills (e.g. a young person's dependability, persistence), confidence, and other factors linked to an individual, also affect labour market outcomes and wellbeing (although the direction of causation is unclear as low self confidence may lead to unemployment and/or be a result of unemployment) (Blanden et al., 2007; Felstead et al., 2007; Green, 2009; Mroz and Savage, 2006). These may have

long-term and persistent negative scaring effects in terms of pay or unemployment propensity and may be due to signalling to employers who then select people with these characteristics, their influence on job search or that these characteristics may lead to better educational performance (Carneiro et al., 2007; Uysal and Pohlmeier, 2009; Heineck, 2010). Improved human capital can both improve productivity and also increase opportunities for people to achieve what they value and enrich their lives i.e. improving their opportunities for functioning, so the two are interconnected (Sen, 1997). Human capital may develop larger human capabilities, and vice versa, within a closed loop, which also includes modes of production (Lanzi, 2007).

Further, those young people who are most vulnerable or disadvantaged (e.g. those who lack qualifications, those with social, emotional or behavioural difficulties) are less likely to make successful transitions into adult life (Bynner and Parsons 2002), while the highly-educated can wait for a better job offer and get more offers than those with a lower education who get fewer offers and are under greater pressure to accept offers (Schmelzer, 2011). Doiron and Gørgens (2008) found that the duration of unemployment has a negative effect for those with post-secondary education but little effect on those without post-secondary education.

External factors such as the state of the economic environment or institutions also influence the level of 'scarring' for those suffering job displacement (Eliaso and Storrie, 2006; Gangl, 2006), or graduates who graduate in poor economic times (Kahn, 2010). Such external capabilities, including social norms and institutions affect people's opportunities to achievement (Nussbaum, 2000). Unemployment has less impact on prospects of those in high unemployment areas possibly due to social norms being influenced by the greater prevalence of unemployment (Clark, 2003; Lupi and Ordine, 2002). Gebel (2010) found that the early career outcomes of having temporary compared to permanent labour market entry contracts were lower in Germany compared to the UK, indicating the importance of the differing institutional contexts. Strandh and Nordlund (2008) also found that the positive effects of both employment and training active labour market policies (in terms of reaching pre-unemployment income levels and unemployment or likely exit form the labour market) operate differently from each other over time.

The wider capability approach argues that a young person looking for work may lack resources, and/or the knowledge to use these, and/or have appropriate support services available, and/or the ability or motivation to act – and that *any* of these may result in a lack of capability or the ability for them to make appropriate choices (Sen, 1985, 1993, 1998). So rather than just focusing whether a young person is in work, or the general type of work that they do, we would also need to consider their access to resources to get or improve their job and their motivation etc. Under a capabilities approach, inequality should not be limited to material dimensions such as a person's income or wealth, but should include things that are only partly influenced by their affluence such as the richness of family life, relationships, capacity to influence the public sphere and politics and sustainability of their lifestyles. It focuses on the ("substantive") freedom of people to choose what they value as opposed to narrowly focusing on utility maximization (e.g. happiness or wellbeing) or access to resources (such as income or access to a car to get to work or leisure). The approach is concerned with what people can do rather than what they actually do. Also it recognizes differences and diversity between people (heterogeneity), the different or multi-dimensional influences on someone's welfare and the crucial importance of autonomy and freedom of choice.

The capability approach is concerned with the ability to achieve a combination of functions that someone values, and not just a single capability.

> "A person's advantage in terms of opportunities is judged to be lower than that of another if she has less capability – less real opportunity – to achieve those things that she has reason to value" (Sen, 2009, p. 231).

Accordingly, for the capabilities approach, wellbeing should be assessed with reference to what people are free to be or do; for example, being able to work, to care, and to participate in the life of the community. Capabilities represent the potential to achieve valued functionings, governed by (for example) having access to skills development opportunities, working in an environment where individuals have the opportunity to make constructive contributions and engage in social interactions with friends or neighbours etc., and the extent to which people of their class, gender and race are permitted to participate in work and learning (Walker & Unterhalter, 2007).

> "Evaluating capabilities rather than resources or outcomes shifts the axis of analysis to establishing and evaluating the conditions that enable individuals to take decisions based on what they have reason to value" (Walker & Unterhalter, 2007, p. 3).

This paper considers the 'scarring' effects of the length of unemployment on the progress of the cohort of people aged 18 to 24 years in 1998 through to 2008 in the UK, using British Household Panel data (BHPS). It considers the effects upon pay, likelihood of unemployment and wellbeing (as measured by their overall satisfaction with life). Section 2 presents some descriptive statistics concerning the age group. Section 3 presents models of 'scarring' effects as the cohort ages during this period. Section 4 presents the conclusions.

2. Data and descriptive statistics

In this section the progress of the group of 18 to 24 year olds as they age over the period 1998 to 2008 is presented. The data are from the British Household Panel Survey waves corresponding to H (mainly 1998) and R (mainly 2008) and are modelled to determine individual characteristics, personal circumstances and other variables associated with monthly pay, the likelihood of being unemployed and their overall satisfaction with life for the years 1998, 2003 and 2008**.** The cohort of those aged 18 to 24 in 1998 are followed for a decade, with 18 being the age at which nearly all school students have left school. So by 2008 they were 28-34 years old.

Summaries of the dependent variables are summarized in table 1. The numbers in the cohort was 607 of which 56% were female. The sample size is smaller in table 1 due to the differential answering of questions. The mean monthly pay was £802 in 1998 when the respondents were young (18-24 years), but this more than doubled by 2008 as the age of the people had increased by a decade, but also inflation led to higher nominal prices. The percentage of the cohort that was unemployed also decreased markedly (from 6.4% to 4.4%) as their careers became more established and their household responsibilities increased. Finally, wellbeing, as measured by satisfaction with life, slightly decreased for the cohort over the time period (from 83.3% to 61.7% being satisfied).

Table 1: Dependent variables

	1998	2003	2008
N	445	454	423
Mean pay last month (£)	802.00	1448.82	1929.11
Standard deviation of mean pay (£)	427.75	1448.82	1244.99
% Unemployed	6.4%	5.4%	4.4%
% satisfied with life	83.3%	82.3%	81.7%

The independent variables are summarised in Table 2 taking the situation in 2003 as being representative. One partial measure of human capital is qualifications and nearly a quarter (23.6%) had a degree while 31.0% had high school leaving final qualifications (A levels or equivalent) as their highest qualification and 6.1% had no qualifications. Near four-fifths (79.6%) were in employment, 5.4% unemployed and 15.0% classified as other (mostly in education or training). Over a third were in rental housing (35.7%), which may indicate choice or that they were unable to purchase a house or perhaps that they lived with parents. Nearly half (46.1%) were single (not married or having a partner). Nearly 70% had access to a car or van, which may also measure access to resources in most cases. Confidence is important in terms of having the capability to function, being able to take opportunities and make choices and in terms of people being able to have a voice in what they consider important. In this around half (51.5%) were not losing confidence at the time of the survey and over a third (36.0%) were no worse off than usual, but around 12.5% were losing confidence more or much more than usual.

The remainder of the dependant variables were measured on continuous or Likert scales. The length of unemployment is important for the reasons discussed above and the average annual length of unemployment in weeks before the first survey in 1998 was 2.43 weeks (but with a wide variation as indicated by the standard deviation of 8.59). Social networks and social capital (important for job search and the achievement of valued functioning in terms of capabilities) are measured by the frequency of talking to neighbours (on a 1-5 scale with talking 'most days' valued as 1 and a mean of 2.10) and frequency of meeting people (on a 1-5 scale with talking 'most days' valued as 1 and a mean of 1.52). The number of children (mean 0.85) may act as a motivator for gaining employment, but may also mean that pay falls, particularly for mothers (but not usually for father who actually

earn more than non-fathers (Paull, 2008)). Finally the number of people in the household (mean 3.05) indicates sharing accommodation or living with parents or other relatives if the person is single, often indicating limited resources.

Table 2: Independent variables taking the situation in 2003 as representative.

Highest Academic Qualification	N	Percentage
Degree	139	23.6
HND, HNC, teaching	41	7.0
A Level	183	31.0
O Level, CSE	191	32.4
None of these	36	6.1
Total	590	
Employment status		
Employed	483	79.6
Unemployed	33	5.4
Other (mainly education, training)	91	15.0
Rent house	210	35.7
Single	280	46.1
Have access to a car or van	413	69.9
Losing Confidence		
Not at all	300	51.5
No more than usual	210	36.0
Rather more	65	11.2
Much more	8	1.4
Total	583	
Continuous and Likert Variables	**Mean**	**St. dev.**
Annual weeks unemployed until 1st September 1998	2.43	8.59
Frequency of talking to neighbours (1 = most days - 5 = never)	2.10	1.10
Frequency of meeting people (1 = most days - 5 = never)	1.52	0.66
Children in household	0.85	0.73
Number of people in household	3.05	1.50

3. Models of pay, likelihood of unemployment and wellbeing

3.1. Pay

Taking three waves corresponding to 1998, 2003 and 2008 for those aged 18 to 24 in 1998 an Ordinary Least Squares (OLS) regression model was used to fit the natural log of the last month's current pay. Two further variables were included in the analysis in order to determine the scarring effects of having been unemployed 5 years before (in the case of 2003) and both 5 and 10 years before (in 2008), using the measure of weeks unemployed in the respective years. The results are presented in Table 3, showing the coefficients and the standard errors.

Table 3: Determinants of the last month's pay

	1998pay		2003pay		2008pay	
	Coef	**se**	**Coef**	**se**	**coef**	**se**
Female	-0.239***	0.054	-0.342***	0.048	-0.414***	0.058
Age at Date of Interview	0.060***	0.015	0.069***	0.012	0.022	0.014
Single	0.598***	0.180	0.965***	0.122	0.550***	0.124
Children in household	0.340***	0.100	0.517***	0.068	0.339***	0.075
Rent house	-0.060	0.059	-0.166***	0.053	-0.130*	0.069
Frequency of talking to neighbours	0.005	0.026	-0.007	0.025	0.059**	0.029
Frequency of meeting people	0.057	0.045	0.047	0.038	0.056	0.043
Qualification (baseline degree+)						
HND, HNC, teaching	-0.055	0.137	-0.338***	0.100	-0.415***	0.120
A Level	-0.124	0.092	-0.162***	0.062	-0.270***	0.074
O Level, CSE	-0.189**	0.095	-0.241***	0.064	-0.356***	0.077
None	-0.143	0.180	-0.499***	0.147	-0.218	0.181
Employment Status (baseline employed)						
Unemployed	-0.506	0.315	-0.359	0.303	0.312	0.437

Other	-1.047***	0.077	-0.689***	0.138	-0.385***	0.148
Losing confidence	-0.082**	0.040	0.032	0.034	-0.051	0.042
Weeks unemployed 5 years ago			-0.005	0.004	-0.012**	0.006
Weeks unemployed 10 years ago					-0.011***	0.004
Constant	5.100***	0.411	4.748***	0.367	6.604***	0.493
Number of observations	437		440		403	
Adjusted R square	45%		35%		31%	
Root mean squared error	0.53		0.49		0.55	

Note: *** p<0.01, ** p<0.05, * p<0.1

In 1998 significant determinants of higher pay are: being male, being older (within the 18-24 age group), being single, having children, not being in higher education or training (they were in the 'other' employment group), and not losing confidence. Each of these are as expected, except perhaps having children (which as discussed above was indeterminate). These effects persist as the cohort ages, although not losing confidence is only significantly associated with increased pay in 1998, As the cohort ages higher qualifications become increasing important to enhancing pay levels and are only significant in later years (unsurprisingly as when young having a higher education may be countered by more work experience of those with only low qualifications and there may be little difference between the pay levels of the newly employed). Renting only becomes significant (negatively associated with pay) in later years (as in 1998 many will still be students or gathering resources to purchase houses) and social networks, where talking to neighbours more is associated with greater pay, only becomes significant in 2008 (perhaps as young people live on more transient neighbourhoods and are more centred on their immediate friends).

There is strong evidence of scarring in 2008 with a positive association between pay and the number of weeks unemployed ten years ago, when they first entered the labour market and five years before, both being significant.

3.2. Unemployment

As the dependent variable is binary (employed or unemployed) a binary logistic regression was used to obtain the probability of being unemployed in the respective year and the coefficients of the models are displayed in Table 4. In these models the dependent variable is 1 if being unemployed and 0 if in work or in education and training.

Table 4: logistic models of being unemployed

	1998Uemp		2003Uemp		2008Uemp	
	coef	**se**	**coef**	**Se**	**coef**	**se**
Female	-0.409	0.393	-0.038	0.428	-1.258**	0.580
Age at Date of Interview	-0.094	0.099	0.025	0.108	0.178	0.132
Single	3.766**	1.798	1.450	1.374	0.095	1.498
Children in household	1.821*	1.023	0.024	0.866	-0.262	0.992
Number of people in household	0.099	0.147	0.066	0.178	0.082	0.253
Rent house	0.728*	0.404	-0.462	0.484	0.906	0.581
Qualification (baseline degree+)						
HND, HNC, Teaching			-0.913	1.141	-0.551	1.219
A Level	-0.746	0.715	-0.569	0.658	-1.182	0.933
O Level, CSE	-0.534	0.702	0.433	0.555	-0.038	0.752
None	1.181	0.785	-0.048	1.013	-1.013	1.160
Frequency of talking to neighbours	0.036	0.161	0.259	0.195	-0.086	0.247
Frequency of meeting people	0.081	0.290	0.043	0.323	0.500	0.335
Losing confidence	0.892***	0.242	-0.274	0.313	0.990***	0.326
Does not have the use of car or van	0.677***	0.240	0.120	0.281	0.806**	0.325
Weeks unemployed 5 years ago			0.062***	0.015	0.032*	0.019
Weeks unemployed 10 years ago					0.058***	0.019
Constant	-7.381**	3.183	-5.196	3.580	-12.627***	4.642
Number of Observations	565		546		533	
Pseudo R Square	20.6%		15.8%		32.4%	
Note: *** p<0.01, ** p<0.05, * p<0.1						

In 1998 being single is associated with being unemployed, as is the case if there are (more) children in the household, loss of confidence and not having access to a car or van. As the cohort progresses to 25 to 29 year old (in 2003) most of the associations disappear, except for some scarring effect with there being a significant association between the likelihood of being unemployed in 2003 and the number of weeks unemployed when entering the labour market some five years previously. By 2008, as the 1998 cohort has aged

by 10 years there is a pronounced effect of scaring in that the number of weeks unemployed five and ten years previously are significantly positively associated with being unemployed.

In the 2008 group (now 30 to 34 years old) females are also significantly less likely to be unemployed. However, those who lack confidence or do not have the use of a car or van are more likely to be unemployed. The results indicate the variation in the importance of different factors over time, the crucial importance of scarring to unemployment and also the differing, and greater variety of, factors related to pay as compared to unemployment.

3.3. Satisfaction with life

The effect of scarring on overall satisfaction with life is now reported and a binary logistic regression model was used to model satisfied with life (value = 1) versus not particularly satisfied (value = 0). The model coefficients are presented in Table 5.

Table 5: Logistic regression model of satisfaction with life

	1998		2003		2008	
	Coef	**Se**	**coef**	**se**	**coef**	**se**
Female	0.207	0.357	1.177***	0.446	0.707	0.468
Age at Date of Interview	-0.223**	0.095	-0.147	0.108	0.135	0.106
Single	-0.643	1.088	-1.214	1.158	0.414	1.045
Children in household	0.018	0.645	-0.438	0.662	1.212*	0.708
Number of people in household	0.015	0.140	-0.305	0.189	-0.050	0.210
Rent house	-0.165	0.357	0.474	0.455	-0.082	0.464
Qualification (baseline degree+)						
HND, HNC, Teaching	0.702	1.166	-0.872	0.856	0.093	1.103
A level	0.019	0.608	-0.636	0.601	-0.844	0.665
O Level, CSE	-0.847	0.594	-0.957	0.602	-0.601	0.696
None	-0.465	1.017	-1.941*	1.039	-2.018*	1.094
Frequency of talking to neighbours	-0.357**	0.151	-0.358*	0.189	0.182	0.202
Frequency of meeting people	-0.222	0.269	-0.358	0.293	-0.617**	0.301
Financial situation	-0.607***	0.184	-0.200	0.252	-0.428*	0.238
Employment Status (baseline employed)						
Unemployed	1.110	1.506	-2.504	1.617		
Other	0.480	0.632	1.380	1.559	1.260	1.376
Natural log of last months pay	0.306	0.288	0.968**	0.442	0.567	0.424
Annual weeks unemployed: year to Sept 1	-0.041*	0.024	0.014	0.033		
Losing confidence	-0.926***	0.233	-1.642***	0.288	-1.391***	0.314

Pay change % from 1998 (5 Yr)			-2.427*	1.344		
Weeks unemployed 5 years ago			-0.010	0.035	-0.009	0.036
Pay change % from 1998 (10 Yr)					-1.278	1.295
Weeks unemployed 10 years ago					-0.023	0.031
Constant	9.472***	3.292	5.725	3.926	-2.729	4.593
Number of Observations	435		351		310	
Pseudo R Square	18.6%		25.7%		23.6%	
Note: *** p<0.01, ** p<0.05, * p<0.1						

In this model, further financial related variables are included: their financial situation (as measured by the question of how well is the person doing financially, which is closely linked to their financial capability), the natural log of last months pay, the annual weeks unemployed in that year, and pay change from five and from ten years earlier. In 1998 being young (within the 18-24 year old age group), infrequent talking to neighbours, being in a poor financial situation, annual number of weeks unemployed and losing of confidence are all significantly associated with not being satisfied with life.

Moving on five years, having no qualifications, infrequent talking to neighbours and a high percentage change in pay from 1998 are all associated with low satisfaction with life. The negative relation with pay increase seems counter intuitive but may be partly due to people moving from low pay when they were students up to higher pay after they graduate but not as high as expected. Meanwhile higher pay last month remains positively bur becomes significantly associated with life satisfaction, as expected, and being female.

In 2008 to be satisfied with life a good financial capability again becomes significant and is important as is frequently in meeting people. Only in 2008 do children in the household come as significant in being associated with greater satisfaction with life. Meanwhile, having no qualifications and losing confidence are negatively and significantly associated with lower life satisfaction. There appears to be little scaring effects due to previous unemployment.

4. Conclusion

This paper considered the scarring effects of periods of unemployment near the start of their working lives on the futures of young people, in terms of labour market outcomes, such as the likelihood of further unemployment and pay as well as reduced wellbeing (measured by satisfaction with life). In terms of capabilities, each of these is important in resources, valued functions, such as being in employment, and life satisfaction.

In the three models, the factors that were important for better outcomes varied across each of the dependent variables. For pay, factors significantly associated with greater pay included being male, being older (within the 18-24 age group), being single, having children, not being in higher education or training (they were in the 'other' employment group), and not losing confidence. In later years as the cohorts gets older, higher qualifications become increasing important to enhancing pay levels and are only significant in later years and renting becomes significantly (negatively) associated with pay.

Unlike pay, where there was a positive relationship, being single or having (more) children in 1998 were significantly linked to unemployment (although this was not the case in later years). Not having resources (in terms of no access to a car or van) was also associated with being unemployed. For satisfaction with life, low qualifications (as with pay in 2003). Being female was significantly associated with lower pay in each year, but with lower unemployment (in 2008) and higher life satisfaction (in 2003).

In all three cases, losing confidence was associated with negative results in terms of less pay, higher likelihood of unemployment and lower life satisfaction. This suggests the importance of confidence as an important aspect of labour market success and as a key aspect of improved capability.

For pay, many of the same variables were significant for each of the three years that the cohort was followed, but this was less the case for unemployment and life satisfaction. The results suggest the importance of taking a longitudinal perspective, particularly for the early years around entry in to the labour market

There is strong evidence of scarring in 2008 in terms of pay with the number of weeks unemployed ten years ago, when they first entered the labour market and five years before, both being significant. For unemployment there is a scarring effect between the likelihood of being unemployed in 2003 and the number of weeks unemployed when entering the labour market some five years previously, while in 2008 there is a pronounced effect of scaring in that the number of weeks unemployed five and ten years previously are significantly positively associated with being unemployed. Foe life satisfaction, there does not appear to be significant scarring due to previous unemployment.

Hence the results indicate scarring for pay and unemployment and pay, but not for life satisfaction, with sometimes differing other factors being important in different periods for the cohort. The importance of people losing confidence appears to be important in all cases

and indicates that such psychological factors need to be considered more carefully as they affect the capabilities of young people in the labour market.

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C. Labour market trajectories and young Europeans' capabilities to avoid poverty, social exclusion and dependency: a comparative analysis of 23 European countries

Björn Halleröd & Hans Ekbrand

1. Introduction

Young people in todays Europe find it increasingly difficult to get a job, support themselves, and establish an independent household. At the same time, although there are large differences between countries, the young generation is better educated and, hence, possesses more formal human capital than ever. European countries are also ageing societies, which means that relatively large cohorts are about to retire from the labour market and that we are facing an increasing support burden on those who are working. Hence, at the same time as young people find it increasingly hard to make the transition into adulthood and there is an elaborated discussion about a threatening labour shortage - that to few have to support to many. This paper builds on the not particularly bold assumption that young people want a life without economic hardship and want to establish an independent household. That is, we assume that these are functions that young people have reason to value. The question is why young Europeans to a large extent lack the capabilities to do so. More specifically we want to investigate the link between young peoples living conditions and their labour market related position.

Our point of departure is that all people are in a transitional phase, that a human life is a transition from birth to death that involves a string of more or less significant changes. It is only when we look at the society trough a snapshot lens that we can make categorisations that provide a picture of, we would say, deceptive stability that makes it seemingly meaningful to talk about, for example, students, workers, single mothers, and unemployed as if they were fixed entities. If we instead accept the idea that transition is the normal state we can also see not only that some periods in life such as adolescence are more volatile than others but investigate to what degree different types of trajectories have different implications on peoples life.

At any point of time people can be assigned a specific relationship to the labour market; full time employed, self employed, inactive, retired, student, unemployed etc. These

positions are, from a longitudinal perspective, more or less temporal as individuals move from one position to another. As a consequence every labour market position that from a cross sectional perspective appears as fixed is from a life course perspective representing a more or less temporal situation. Once we acknowledge this we also have to take into account that at any given point of time there exist several different types of, for example, unemployment. It also follows that the unemployed and the employed should not be looked upon as two clearly separated categories. They should instead be looked upon as two heterogeneous groups of individuals that at one given point of time in varying degrees are included or excluded from the labour market (Furåker 2001; Strandh 2000).

Rather than dividing people into specific categories depending on their current labour market position, we should try to understand different employment positions as existing along a continuum of marginalization from total integration to total exclusion (Svedberg 1997). But it is not only about more or less, longer or shorter unemployment spells, it is also about types of transitions. It is one thing to be unemployed in the process of leaving higher education and establish oneself on the labour market, a completely different thing to start as a full time worker and then be pushed into unemployment just to end up in an early retirement schema (Halleröd 2003). Hence, two individuals that during a given period of time are exposed to the same amount of unemployment can nevertheless be in very different labour market positions. One of them could be caught a in vicious circle, pushed out of employment and into poverty while the other might be in a process from education into labour market integration and economic security.

Our aim is to answer four specific research questions:

1. What types of dominating labour market related trajectories (LMRT) exists in within the EU?
2. What kind of LMRT:s are specifically common among young Europeans?
3. What kind of LMRT:s are especially related to poverty, social exclusion, and lack of independency among young Europeans?
4. Are there substantial differences between EU countries?

2. Data and labour market trajectories

We will use the EU-SILC longitudinal data set from 2007 and 2008 from 23 EU countries (including the non-member Norway). Since our analysis builds on longitudinal data we are forced to restrict our analysis to countries that are covered by the EU-SILC longitudinal dataset. The include countries are: Austria (AT), Belgium (BE), Cyprus (CY), Czech Republic (CZ), Denmark (DK), Estonia (EE), Finland (FI), France (FR), Greece (GR), Hungary (HU), Ireland (IE), Italy (IT), Latvia (LV), Netherlands (NL), Norway (NO), Poland (PL), Portugal (PT), Slovakia (SK), Slovenia (SI), Spain (ES), Sweden (SE), and the United Kingdom (UK).

Data makes up a representative sample of the total population but in this case we have restricted our sample to the age spectra 16 – 65, focusing on the age span 16 – 25. The EU-SILC panel data follows a four year cycle, which means that every individual is followed for four years and that every year a forth a of the sample is replaced by a new panel section. An effect of this system is that the fewer years we are using, the larger sample we get. In order to have a sufficient sample we have decided to use a three-year panel. In a first step we have selected those who participated during 2006 – 2008. In order to further boast the sample size we have also added the sample section that participated during 2005 – 2007. The total survey size is 148,619 and the age restricted (16-25) sample size is 26,755.

2.1 Labour market trajectories

Longitudinal EU-SILC data contains monthly information about 'main activity'. At every interview respondents are asked to give a retrospective description of their main activity. For every month nine alternatives are offered:

1. Employee (full time)
2. Employee (part time)
3. Self-employed (full time)
4. Self-employed (part time)
5. Unemployed
6. Retired
7. Student
8. Other inactive
9. Compulsory military service

Thus, all individuals included in our working sample have 36 consecutive monthly measurements of main activity. We use this information to derive clusters of specific labour market trajectories. As a first step, before moving on with the cluster analysis, we reduce the number of main activity position. The ninth category is very small and exists only in some of the countries and therefore this group is excluded from the analysis. We also collapse full-time and part-time self-employed. Hence, the analysis is based on seven main activities position, which also means that seven clusters, those who do not change position during the observation period, are given from the beginning. Among the non-static, transitions are observed on a monthly basis during a three-year period, which gives 7^{35} theoretically possible transitions. Even though the actually observed trajectories are considerable less, 7^{35} is a very large figure, there is a need to systematize observed data. In order to do so a cluster analysis where each month was considered as one variable were conducted. To be able to cluster categorical data, with a large dataset of tens of thousands of cases, the distance matrix used by the clustering algorithm "clara" (Rousseeuw 1990) was based on a pseudo-Gower metric of dummy variables. The resulting clusters represent unstable labour-market status, transitions, over the measurement period. The clustering analysis reduced the complexity of the data into 34 clusters that describes different labour market trajectories. We reduced data further by merging clusters with similar main activities onto a categorization of 17 trajectories, of which seven were stable and, hence, ten are derived from the cluster analysis.

Table 1 display the trajectories. The first seven are stable (EFT=employed full time, EPT=employed part time) with a straightforward interpretation: The EFT cluster has been full time employed for 36 consecutive months, Stud has been students for 36 months et cetera. In order to label the unstable trajectories the following logic has been used. The first part of the name describes the most common position within the cluster at the beginning of the observation window, i.e., the three-year period while the second part of the name, consequently, describes the most common activity within the cluster by the end of the observation window. For example, the category 'Stud-EFT' consists of people whose main activity was 'student' at the beginning of the observation widow and who predominately are full-time employed by the end of the period. Likewise, 'EFT-Retired' consists of people that retire during the observed period. There are five trajectories whose label ends with 'us'.

Within these categories the main activity is the same both at the beginning and the end of the period, but it has not been stable through out the observed period. 'Stud-us' has mainly been studying during the whole period but during the three-year period they are also engaged in other activities, most predominately full-time or part-time work. 'EFT-us' has mainly been full-time employed but the have mixed this activity with, for example, unemployment and/or inactivity. The group 'Unemp-us consists of people that are moving back and forth between unemployment and other activities. We use a slash to indicate that there are two distinguished main activities, for example people that are moving between employment (EFT or EPT) and unemployment or inactivity (EFT-Unemp/inactive).

3. Activity trajectories and income poverty among young Europeans – description

3.1 Clusters and poverty

We will start the descriptive part of the empirical analysis discussing poverty and LMT:s. The term poverty refer to income poverty and a person is poor if he or she lives in a household with an equivalent disposable household income that falls below 60 per cent of the median equivalent disposable income in the member stat where he or she lives. Hence, our poverty measure is equal to the measure of 'at-risk of poverty' used within the EU. The concept poverty is consistently referring to this definition throughout the paper.

Table 1. Clusters of main activity trajectories in 23 European countries (16-64 years)

Trajectories	Frequency	Per cent	Per cent in poverty	Per cent of all poor
EFT	48,021	32.31	2.54	7.39
EPT	3,368	2.27	5.11	1.04
Self	7,987	5.37	15.66	7.57
Stud	7,771	5.23	13.37	6.29
Retired	13,603	9.15	8.47	6.98
Unemp	1,420	0.96	45.95	3.95
Inactive	9,422	6.34	23.57	13.45
EFT-EFT	10,500	7.07	6.41	4.07
Empl-us	8,739	5.88	10.09	5.33
Self-us	6,721	4.52	17.04	6.93
Stud-us	6,151	4.14	19.60	7.29
Unemp-us	7,780	5.23	31.90	15.00
Into-empl	3,045	2.05	9.08	1.67

Stud-EFT	3,436	2.31	7.37	1.53
EFT-retired	1,959	1.32	5.87	0.70
EFT-Unemp/inactive	2,363	1.59	19.84	2.83
Inactive-us	6,333	4.26	20.81	7.98
All	148,619	100	11.12	100

Table 1 gives an overview of the total population (16 – 64 years of age) the size of the trajectories, the poverty rate in each group, and the distribution of poverty between groups. Looking at this we can see that the poverty risk is clearly related to a marginal labour market position. Looking at the fourth column we can for example see among full time employed the poverty rate is below 3 per cent, while it is 11 per cent among those who are employed but on an unstable basis. The poverty rate is considerable higher among students, inactive and in particular among the unemployed; almost every third person in the Unemp-us and almost every second of the consistently unemployed are poor.

Table 2 gives the same information as Table 1 but is restricted to people aged between 16 and 25. Apart from the fact that there are very few retired, we guess that the few, 25 cases, that are found in this category are measurement errors or suffers from some kind of disabilities, the picture looks largely the same among the young as in the total population, i.e., people with a marginal labour market positions suffers from the highest poverty risk. The huge differences compared to the total population is that almost every second young person in poverty are students, i.e. are found in the categories ‘Stud’ or ‘Stud-us’.

Table 2. Clusters of main activity trajectories in among young Europeans (< 26) in 23 European Countries.

Trajectories	Frequency	Per cent	Per cent in poverty	Per cent of all poor
EFT	3,196	12.05	2.55	2.17
EPT	96	0.36	8.33	0.21
Self	164	0.62	17.68	0.78
Stud	7,617	28.71	13.17	26.89
Retired	25	0.09	0.00	0.00
Unemp	224	0.84	50.45	3.03
Inactive	371	1.40	32.34	3.19
EFT-us	1,682	6.34	7.38	3.30
Empl-us	1,128	4.25	15.61	4.70
Self-us	428	1.61	16.86	1.93
Stud-us	5,626	21.20	19.45	29.31
Unemp-us	1,462	5.51	30.23	11.84

Into-empl	751	2.83	8.02	1.61
Stud-EFT	2,873	10.83	7.66	5.88
EFT-retired	3	0.01	0.00	0.00
EFT-Unemp/inactive	340	1.28	18.45	1.66
Other inactive	546	2.06	23.81	3.49
All	26,532	100	14.09	100

It is obvious from Table 3 that there are very few young people in some of the main activity categories. For some categories it is just a natural consequence of age specific circumstances, very few young are for example retired or about to get retired. In other cases it is, even though the initial sample is fairly big, a result of the limited sample size. In order to continue the analysis and be able to give country specific results an additional reduction of LMT:s is made. Table 3 shows how the categories have been collapsed. The main rational has been to put all unstable trajectories that involve some kind of employment in one category labelled 'Empl-us'. In this category we find young people that are about, but not without difficulties, to establish themselves at the labour market. We have distinguished this group from those who are found in categories where the initial main activity is employment but where the end activities is inactivity or, in a few cases, retirement. Our assumption is that this is a group that risks a more permanent labour market exclusion. For the sake of simplicity we have, even though it is not entirely accurate, labelled this group 'Inactive'. Since very few, less than one per cent, are unemployed for 36 consecutive months this category has been merged with the Unemp-us group, i.e., a category where unemployment has been the dominant but not sole main activity.

Table 3. Merged clusters of main activity trajectories

Trajectories	Merged trajectories
EFT	EFT
Student	Student
Unemp Unep-us	Unemployed
EPT	Empl-us
Self-employed	
EFT-us	
Empl-us	
Self-us	
Retired	Inactive
Inactive	

EFT-retired	
Other inactive	
EFT-Unempl/inactive	EFT-Unemp
Stud-us	Stud-us
Stud-EFT	Stud-EFT
Into empl	Stud-Unempl.

Looking at the overall European picture, Table 4, we can see that almost 45 per cent of the young Europeans are either stable or unstable students. A fourth of all young people are in unstable employment while only 13 per cent are in stable employment. About 6 per cent are in transition from education to full time employment. Almost 5 per cent are in the inactive category and abut as many are in a trajectory from full time employment to unemployment. Less than three per cent are in a transition from education to unemployment. The distribution of LMT:s in single countries are shown in the appendix, table A1.

Table 4. Merged clusters of LMT among young Europeans (< 26) in 23 European countries.

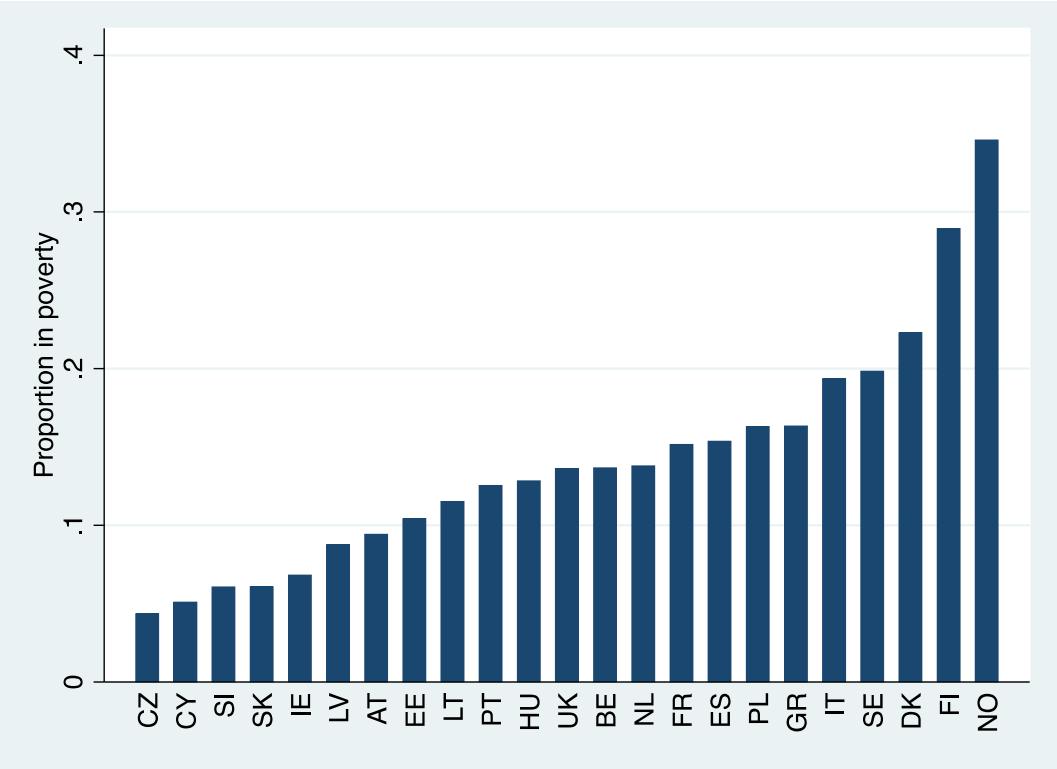
Merged trajectories	Frequency	Per cent	Per cent in poverty		Per cent deprived		Per cent not independent	
EFT	3,196	12.05	2.55		16.41		70.46	
Stud	7,617	28.71	13.17		16.62		96.01	
Unemp-us	1,686	6.35	32.92		42.61		79.95	
Empl-us	3,498	13.18	11.72		18.74		69.50	
Inactive	945	3.56	26.43		39.35		54.92	
Empl-Unemp	340	1.28	18.45		28.85		62.94	
Stud-us	5,626	21.20	19.45		17.90		90.38	
Stud-Empl	2,873	10.83	7.66		17.42		86.36	
Into-empl	751	2.83	8.02		25.87		79.76	
Total	26,532	100	14.09		20.12		83.83	

The poverty rate among young Europeans varies, as can be seen in Figure 1, a lot between different member states but the highest rate is found in a non EU-member Norway, every third young Norwegian lives in poverty. One has of course to notice that Norwegian poverty is measured in relation to the Norwegian median income. But our data shows, perhaps somewhat surprisingly, that following Norway in the upper end of the distribution is Finland, Denmark, and Sweden. On the other hand, in the lower end of the distribution we find the Czech Republic, Cyprus, Slovakia, Slovenia, Ireland, and Latvia. Thus, the results are clearly at odds with the general perception of living conditions and welfare differences

between countries. In the following sections we shall shed additional light on this somewhat puzzling results. For the moment we will just investigate whether there are any substantive country differences that relates to main activity trajectories.

Measures of relative income poverty give important information about the distributions of incomes within countries. In a more fundamental way it gives information about '…Individuals, families and groups in the population // that // lack the resources to obtain the types of diet, participate in the activities and have the living conditions and amenities which are customary, or at least widely encouraged or approved, in the society to which they belong' (Townsend 1979, p 31). However, it says very little about what, in this case, young people in different EU countries can or cannot do. It also builds on the assumption that young Europeans are comparing themselves with other people within their own country, not with young people within the EU as a whole. This is not the place to get lost in the seemingly endless debate about how to understand and measure poverty (Halleröd 1991; Halleröd 1995; Halleröd 2006), we just want to conclude that: A) it is far from clear that young Europeans are making mainly within country comparisons when assessing their living conditions, hence it is not given that the nation state confines 'the society to which they belong'. B) We do not question that young people in Norway are facing a hard time, but when Norway, apart from Luxembourg, Europe's richest country, has the highest youth poverty rate we should at least look for other strategies to measure economic hardship.

Figure 1. Poverty rates among young (16-25) Europeans.



3.2 Material deprivation

Our measure of deprivation builds on a tradition that started with the work of Townsend (1979) and was developed by Mack and Lansley in the early 1980s (Mack and Lansley 1985). The method, often referred to as the 'consensual measure of poverty' has subsequently been refined (Halleröd, Larsson, Gordon, and Ritakallio 2006; Halleröd 1995) and found its way, in a albeit restricted form, into the EU-SILC. In this paper we largely follow the operationalization suggested in a recent EU-report by Bradshaw and Meyhew (Bradshaw and Mayhew 2011), which in turn are building on the work conducted by Guio (2009).

We use a set of indicators to identify what the household could not afford:

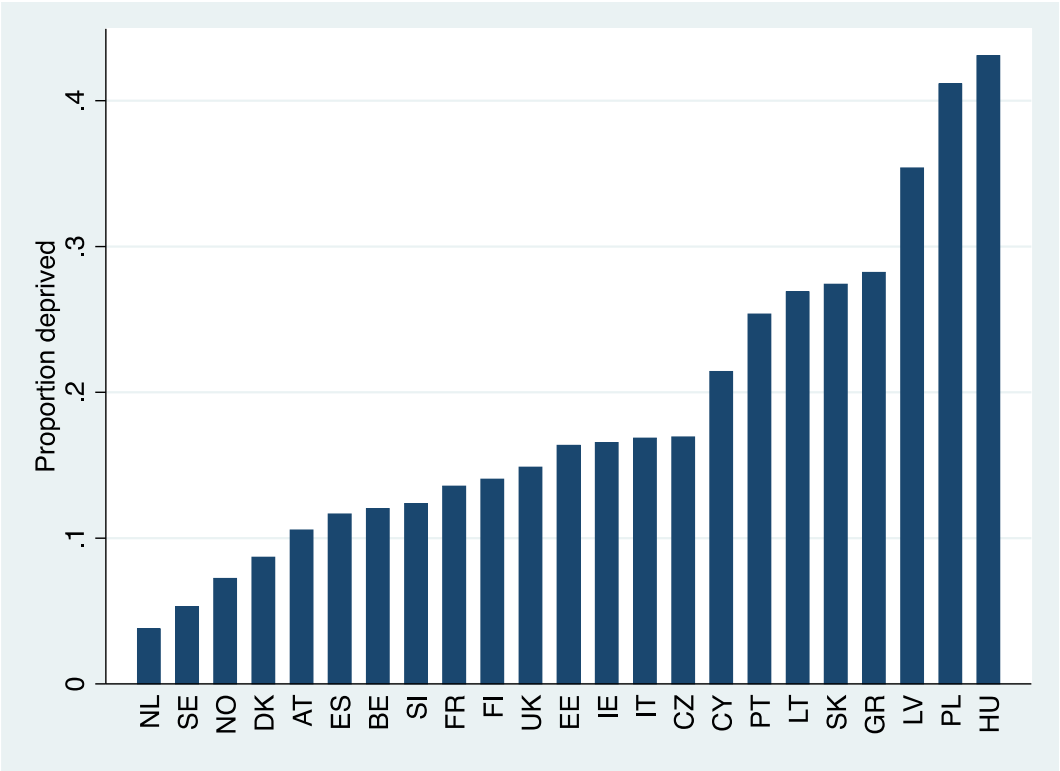
- To face unexpected expenses
- One week annual holiday away from home
- To pay for arrears (mortgage or rent, utility bills or hire purchase instalments)
- A meal with meat, chicken or fish every second day
- To keep home adequately warm
- To have a washing machine

- To have a telephone
- To have a personal car
- To have a computer
- No bath or shower
- No indoor flushing toilet for sole use of the household

Compared to the index used by Bradshaw and Meyhew we have excluded the item 'collar TV' and added 'computer'. The reason to exclude collar TV is that this particular item decreases the validity of the deprivation index. This is clear both from our analysis and Bradshaw and Meyhew's own analysis. This result is also confirmed by analyses using a more comprehensive set of deprivation indicators (Halleröd, Larsson, Gordon, and Ritakallio 2006). The reason to include computer is that it is an item that empirically contributes to the validity of the deprivation index and it is also an item that presumably is increasingly important, not least to young people. Making a simple additive index of the items results in a deprivation measure that ranges from zero to eleven. Again following Bradshaw and Meyhew we set the dividing line between the deprived and non-deprived to three, i.e., anyone that scores three or higher on the deprivation index are defined as deprived. If this dividing line is more correct than any other or if we indeed need a dividing line at all is a more or less open question, which we will not discuss further in this context (e.g. Bradshaw and Mayhew 2011; Halleröd, Larsson, Gordon, and Ritakallio 2006; Halleröd 1995).

Figure 2 shows the deprivation rate among young Europeans in different EU-countries. Comparing with the apparent difference is that the ranking of countries are markedly different. Hungary, Poland and Latvia are now found in the upper end of the distribution while the Nordic countries together with the Netherlands are found in the lower end. Thus, from a European perspective we can conclude that young people in poverty and deprived young people make up two fairly different populations. The question is than to see to what degree main activities trajectories relates to deprivation.

Figure 2. Deprivation rates among young (16-25) Europeans



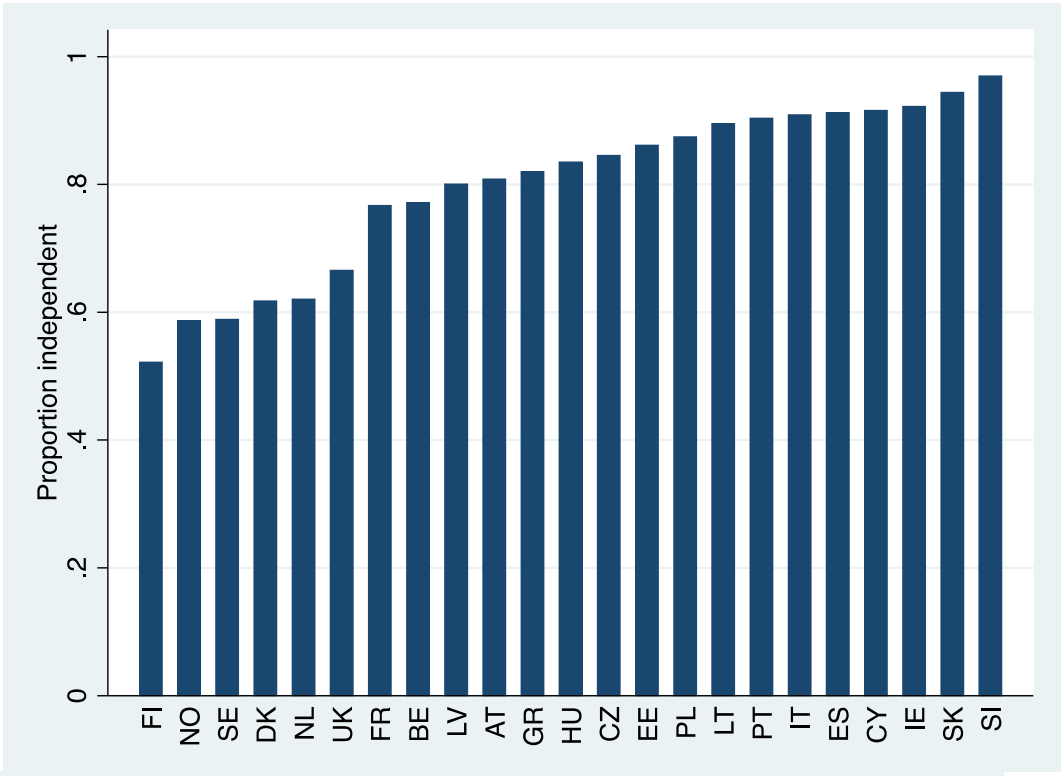
The most marked differences compared to poverty are, as can be seen from Table 4, that the deprivation rate is clearly higher among full time employed (EFT) and lower among students. Otherwise we can se that weak labour market attachment is closely related to deprivation.

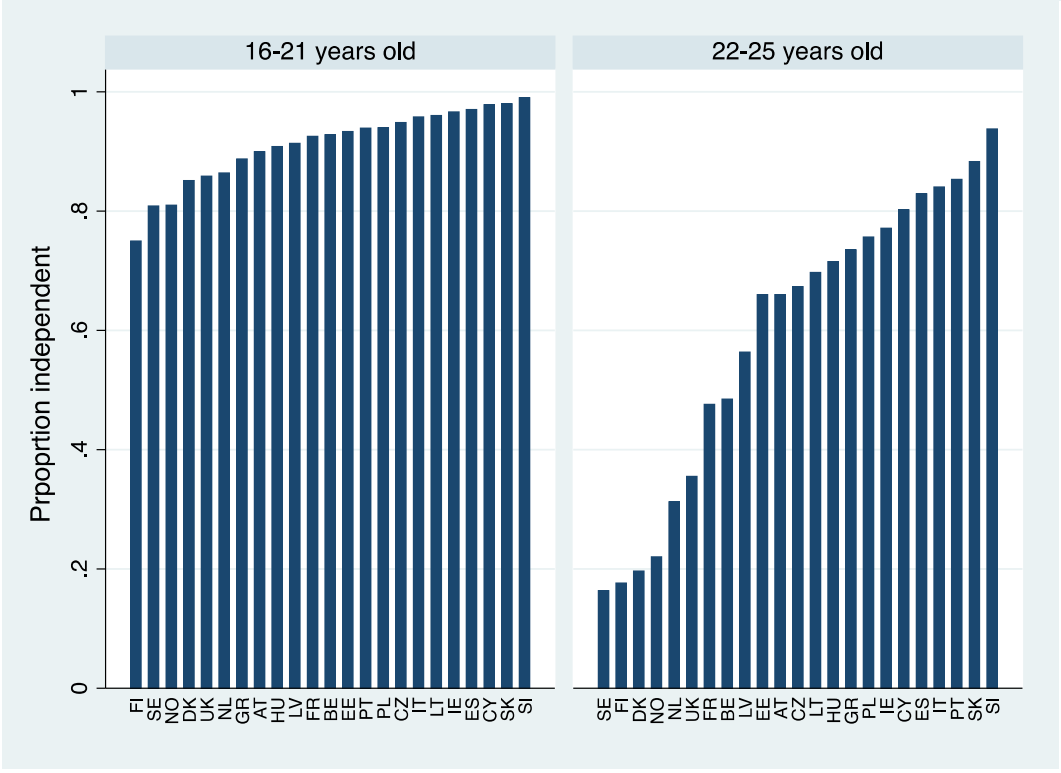
3.3 Independent living

Being able to leave the nest and forming and independent household is an important aspect of young peoples capabilities. It is also important in relation to measures of both deprivation and poverty. One reason to why young people in countries like Norway or Denmark often are poor is that they have the capability to leave the nest early. As can bee, the large majority of young Europeans are part of their parents' household. However, there are marked differences between countries, the Nordic countries followed by the Netherlands and the UK has the lowest fraction of young people living in the parental household. The differences between countries becomes much clearer if we divide the population into those below 22 years of age and those between 22 and 25 years of age. In the Nordic countries less than 20 per cent remains in the nest while in the majority of

countries the figures vary from close to 70 per cent up to above 90 per cent. Hence, young Europeans live very different kind of lives.

Figure 1. Lack of independency rates among young Europeans (16-25 years)





Relating nest leaving with LMT:s we can see that students are overrepresented among 'stayers' while those who are working and, somewhat surprising, inactive more often have left the nest. But, since both nest leaving and LMT:s are age highly age related there is no reason to speculate further on the basis of a bi-variate cross table.

4. A mixed-model analysis of the impact of labour market trajectories

In the following a set of mixed model analysis are presented. The analysis is based on the assumption that people are nested within countries and the analysis provides fixed effects that are assumed to homogenous across countries and random effects capturing differences between countries. Starting with analysing the relationship between LMT:s and household independency, i.e., whether or not young people have left the nest. We start with a null model, i.e., a model that only estimates country differences. We thereafter include LMT:s as at the individual level in order to find out if and to what degree LMT:s affects individual probabilities and country differences. Thereafter we control for age, gender and education. In the final model we also control for GDP per capita. We thereafter repeat these steps using poverty as dependent variable. However, when analysing poverty in the third step we also control for nest leaving. Finally we analyse deprivation in the same manner but in this case we in the third step include also poverty as control variable.

4.1 Independent living

The estimated models are so called linear probability models. There are two reasons why we have chosen a linear model instead of a logit-model. First, the linear model allows a straightforward interpretation of the results in terms of proportions and it has also been shown that a linear model basically do presents identical significant estimates as the logit model (Hellevik 2007). Thus the constant in the null-model in Table 5 shows the proportion of young people that have not left the nest. This proportion is .79, i.e., 79 per cent, which differs a lot from the overall figure of 84 per cent in Table 4. The reason to this dissimilarity is that the regression model adjusts for differences in country sample sizes (basically assuming that all samples are equally large). Second, our stepwise approach means that we will compare the effects of LMT:s between models with different sets of independent variables. Comparing logistic regression estimates, Log-Odds or Odds Ratios, from different models is

not unproblematic. Logistic regression estimates relate to an unobserved underlying latent variable *y**. The problem is that the variance of *y** is not fixed, it will change as variables are added to the model. It does so because the residual variance of *y** is fixed to the standard logistic distribution of 3.29. So, the variance of *y** is bound to increase as we improve our model, which means that we change scale and the size of the regression coefficient will be biased upwards as new variables are entered into the model (Mood 2009).

Table 1. Mixed model – LMT:S and independent living among young (16-25) people in the EU

	Null model		Model 1		Model 2		Model 3
Fixed effects							
Constant	0,789*		0,660*		1,500*		1,743*
Ref: EFT			0		0		0
Stud			0,240*		0,073*		0,073*
Unemp-us			0,077*		0,027*		0,027*
Empl-us			0,019*		-0.004		-0.004
Inactive			-0,155*		-0,161*		-0,161*
Empl-Unemp			-0,067*		-0.072*		-0.072*
Stud-us			0,229*		0,095*		0,095*
Stud-Empl			0,185*		0,091*		0,091*
Into-empl			0,079*		0,042*		0,041*
Sex (male)					0,084*		0,084*
Age					-0,042*		-0,042*
Primary					-0,083*		-0,083*
Lower secondary					-0,048*		-0,048*
Upper secondary					-0,022*		-0,023*
Ref: Post secondary					0		0
GDP							-0,002
Random effects							
Variance: constant	0,017*		0,016*		0,017*		0,011*
Variance: residual	0,123*		0,111*		0,101*		0,101*

A mixed model produces both fixed effects and random effects. In this case it means the following. Fixed effects are assumed to be equal for all countries. Hence, the constant in the null-model is the constant for all 21 countries. The first random parameter, 'variance: constant', tells us to what degree our 21 countries diverge from the overall constant. In this

case we can see that the variance is 0.017 and significant, that is, there are statistical differences between countries. The other random parameter is 'variance: residual' that refers to the remaining within in countries differences. Now, as we in model 1 add LMT:s we will in the fixed part of the model see average effect of trajectories on the probability to stay in the nest. They are fixed because they are supposed to be true – fixed – for all countries. If we assume that LMT:s will explain differences between countries we would like to se a decrease of the random parameter 'variance: constant'. In this case this parameter only change marginally, hence, the fixed LMT:s effects only to a lesser degree explain country differences. However, they do explain more of the within country variance, which is shown by the decrease of the residual variance. Adding additional individual level variables, sex, age, and education, further reduces the residual variance but the not the constant variance, hence, it explains some of the within country difference but not differences between countries. The inclusion of age, sex, and education substantially decreases the impact of LMT:s. Males are more likely to 'stay home', there is a strong age effect, and not having a post secondary education decrease the probability to remain in the parental household. Thus, it is the well educated that tend to remain in the nest, which presumably is explained by their prolonged education. Finally in model 3 we add the country level variable GDP per capita. This variable do not affect the impact of the individual level variables but it does impact on the between country variance. The effect of GDP is negative, i.e., the richer country, the less likely that young people remains in the nest. If we make the assumption that young people across Europe have the same preferences when it comes to nest leaving, this result indicate that general economic constraints is an important factor restricting young Europeans capability to form an independent household.

4.2 Poverty

As in the analysis above the null-model and the fixed part of model 1 basically reproduce distributions that are already known from the descriptive part. The random part of Table 6 shows that inclusion of LMT:s explains part of the within country differences but very little about the between country differences. Hence, the different country compositions of LMT:s do not contribute in any substantive way to our understanding of country differences in youth poverty. However, from model 3 we can see that there are other individual level variables that do contribute to our understanding of country differences. We

can see that poverty is age related, poverty is less common among older youths. There is also an education component that basically shows that the lower education, the higher poverty risk. The most important factor to understand country differences is, however, the ability to form an independent household. Staying in the parental home is a good insurance against poverty, or to put it more straightforward: parents' income offers protection against youth poverty. It is especially so among the youngest young, among the older young parents offer less protection, which reasonably means that young people in poor families more than others lack the capability to leave the nest. Also, in relation to the findings about nest leaving, the results indicate that young people in richer countries become poor, relatively speaking, because they have the resources necessary to leave the nest.

Table 6. Mixed model – LMT:S and poverty among young (16-25) people in the EU

	Null model		Model 1		Model 2		Model 3
Fixed effects							
Constant	0,140*		0,037*		0,613*		0,486*
Ref: EFT			0		0		0
Stud			0,115*		0,117*		0,117*
Unemp-us			0,289*		0,273*		0,273*
Empl-us			0,067*		0,064*		0,064*
Inactive			0,238*		0,194*		0,195*
Empl-Unemp			0,149*		0,129*		0,129*
Stud-us			0,145*		0,155*		0,155*
Stud-Empl			0,036*		0,048*		0,048*
Into-empl			0,053*		0,050*		0,050*
Not independent					-0,609*		-0,611*
Not independent*age					0,024*		0,024*
Sex (male)					0,001		0,001
Age					-0,024*		-0,024*
Primary					0,166*		0,167*
Lower secondary					0,064*		0,065*
Upper secondary					0,017*		0,018*
Ref: Post secondary					0		0
GDP							0,001*
Random effects							
Variance: constant	0,005*		0,005*		0,003*		0,002*
Variance: residual	0,116*		0,111*		0,109*		0,109*

4.3 Deprivation

Also when it comes to deprivation we can conclude, comparing the random part of the null model with model 1 that LMT:s explain part of the within country residuals but to lesser extent the between country variation. Including additional independent individual variables, in this case including also poverty, reduces as expected the impact of LMT:s. Poverty increases the deprivation risk, while staying with parents decrease the risk but just as the case with poverty the older young are less protected by their parents. Among those who left the nest deprivation is decreasing with age. Low education increases the deprivation risk. The final model shows that GDP reduces the between country variance with about 50 per cent (this figure will in fact even larger if we include an interaction between poverty and GDP, i.e., poverty in poor countries is worse than poverty in a rich country). Hence, the member states' economic development is much mire important for deprivation among young people than their individual labour market trajectories.

Table 7. Mixed model – LMT:S and deprivation among young (16-25) people in the EU

	Null model		Model 1		Model 2		Model 3
Fixed effects							
Constant	0,188*		0,157*		0,442*		0,736*
Ref: EFT			0		0		0
Stud			-0,013		-0,067*		-0,067*
Unemp-us			0,241*		0,139*		0,139*
Empl-us			0,032*		0,009		0,009
Inactive			0,210*		0,096*		0,096*
Empl-Unemp			0,107*		0,055*		0,055*
Stud-us			0,025*		-0,015		-0,015
Stud-Empl			0,009*		0,009		0,009
Into-empl			0,070*		0,044*		0,044*
Poverty					0,224*		0,224*
Independent					-0,268*		-0,267*
Independent*age					0,011*		0,011*
Sex (male)					-0,008		-0,008
Age					-0,015		-0,015
Primary					0,277*		0,276*
Lower secondary					0,141*		0,141*
Upper secondary					0,063*		0,063*
Ref: Post secondary					0		0

GDP							-0,003*
Random effects							
Variance: constant	0,011*		0,010*		0,012*		0,004*
Variance: residual	0,150*		0,144*		0,134*		0,134*

5. Conclusion

Young people's living conditions vary greatly between European countries. The poverty rate among people varies from around 35 per cent in Norway to less than five per cent in the Czech Republic. In Hungary more than 40 per cent of the youth population is deprived when it comes to consumption of goods and services. The corresponding figure in the Netherlands is less than 5 per cent. In Slovenia around 90 per cent of the population in the age category 22-25 is still living in the parental household. In Sweden the figure is less than 20 per cent. Thus, young people around Europe have very different capabilities to lead the life they have reason to value.

The main idea guiding the analysis is that people are experience different labour market trajectories, i.e., their current situation can be related to previous experiences relating employment, unemployment, studies and other types of labour market related activities. It is clear from the analysis that certain labour market trajectories are closely related to all three of our outcome indicators: poverty, deprivation, and independent living. Unemployment, but also periods of unstable employment positions are problematic all around Europe and they certainly help us to understand how risks are distributed within a given population. However, labour market trajectories could only explain a fraction of the between country differences. The differences when it comes to distribution of labour market trajectories could thus not explain much of the differences in poverty, deprivation, and independent living between EU-countries. Whether or not LMT:s have different effects in different countries, i.e., if the slopes are random, not fixed, is not explored in this paper. The research presented here do however open up for such an analysis.

The analysis show that youth poverty, i.e., living in a household with an income below 60 per cent of the median income, is most common in the Nordic countries and much less common in countries with considerable lower GDP per capita. Looking at deprivation the picture was completely reversed and distribution between countries to a large extent follows the distribution of GDP per capita. The reason for this pattern is that young people in

the Nordic countries leave the nest at early age and are hence not protected from poverty by their parents' income. But even though they leave the nest they are to a lesser extent deprived than most other young people in Europe. So, one conclusion is that the Nordic countries have manage to build a system where young people have the capability to set up their own independent household in early age. It makes them relatively poor but not particularly deprived and it might be that they think that poverty is a price worth to be paid for being capable of living a life they have reason to value.

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Appendix 1

Table A1. LMT:s by country

	EFT	Stud	Unemp-us	Empl-us	Inactive	Empl-unemp	Stud-us	Stud-empl	Into-empl
AT	23.0	15.7	2.2	21.5	4.7	1.8	20.4	9.1	1.7
BE	11.9	33.1	7.1	8.9	3.7	0.7	22.2	10.8	1.7
CY	10.9	28.9	2.8	13.1	3.3	1.0	31.1	7.0	1.9
CZ	17.9	37.3	4.1	8.6	3.7	1.4	12.7	11.6	2.5
DK	16.6	27.4	1.9	12.1	0.0	1.3	22.3	17.8	0.6
EE	9.8	26.8	3.8	9.5	5.0	1.3	26.7	13.5	3.7
ES	12.4	23.1	8.0	17.0	2.3	1.9	20.9	11.5	3.1
FI	5.3	2.9	3.7	21.2	3.1	0.9	41.1	19.3	2.6
FR	9.9	36.5	4.9	12.6	3.1	0.9	20.2	10.4	1.6
GR	8.3	25.4	13.4	18.3	7.6	1.3	16.2	4.1	5.5
HU	13.1	32.8	5.6	11.9	6.2	1.8	14.9	10.8	2.9
IE	13.3	13.6	6.3	19.6	7.0	1.0	24.9	12.3	2.0
IT	11.5	26.7	13.2	12.5	3.3	0.9	22.6	6.2	3.0
LT	10.0	38.0	2.3	8.2	2.8	0.9	21.7	14.0	2.1
LV	16.7	27.3	3.8	8.8	5.0	3.6	16.5	14.8	3.6
NL	10.3	33.5	1.0	26.9	0.7	0.3	20.7	5.5	1.0
NO	8.1	12.4	2.2	21.0	1.7	1.4	36.3	16.2	0.8
PL	7.1	31.0	10.9	12.3	3.7	1.4	18.8	10.7	4.2
PT	18.4	30.5	4.5	11.0	3.0	1.5	16.4	10.7	3.9
SE	6.8	0.6	2.1	21.3	2.1	1.7	45.0	18.0	2.5
SI	8.8	52.7	1.9	5.5	3.4	0.5	14.2	9.8	3.3
SK	15.1	37.0	5.8	9.6	1.7	0.9	15.2	11.5	3.2
UK	26.5	10.8	4.7	24.3	6.0	1.7	14.3	10.5	1.2

D. Youth unemployment, youth programs and mental health scarring in Sweden – long term mental health effects of two different forms of unemployment experiences

Mattias Strandh, Madelene Nordlund & Anne Hammarström

1. Introduction

Although the global economic crisis increased unemployment for most groups on the labour market it had particularly adverse effects on youth. Youth unemployment numbers increased more than double that of adults and despite recovery from the crisis OECD expects youth unemployment to remain elevated for a long time (Scarpetta et al. 2010). What makes this situation particularly troubling is that previous research suggests substantial labour market "scarring" effects of youth unemployment. Unemployment experiences have here been found to affect future unemployment risks and reduce future earnings (see for instance Layte et al 2000, Gregg 2001, Arumpalam 2001, Burgess *et al.,* 2003, Mroz and Savage 2006). There is thus a risk that the current youth unemployment crisis facing many European countries will create labour market problems for the current generation of youth for a long time. The main policy tool to combat these scarring effects has been through different forms of Active Labor market Policy programs (ALMP) directed at youths. These youth programs aim to reduce human capital loss and signal effects that can cause scarring effects by providing training and activity as an alternative to passive unemployment. Despite evaluations providing relatively mixed results regarding the effectiveness of these programs for job chances, this route together with providing economic resources for job search, is recommended by the OECD to keep youth employable (OECD 2011).

The focus within research on ALMPs has here been very strongly focused on how human capital is affected by participation and how job chances are directly affected by participation. This means that we know relatively little about how program participation affects other central functionings. We for instance know that unemployment is related to short term mental health consequences for both young and adult populations (see for instance Strandh 2000, Mckee-Ryan et al. 2005, Paul and Moser 2009). We know considerably less both about whether there are long term mental health consequences of youth unemployment and if program participation has the same negative mental health

effects as open undisguised unemployment. Such possible effects of participation in youth programs are important to take into account for several reasons. Mental health is important and if program participation affects the capability of unemployed youth to achieve good mental health in the short or long term, that is a value in itself. Good mental health is however also a central factor for the capability to achieve other goals, not least in relation to the labour market where health has been shown to affect both job chances and unemployment risks (see for instance Clausen et al. 1993, Mastekaasa 1996, Salm 2009). An effect of program participation on mental health could from this perspective lead to what Andersen (2009) labels "indirect employment effects" (IEE).

In this chapter we will try to add to previous research on unemployment scarring and the effects of ALMP participation by looking at mental health scarring over the life course. The overarching questions are here both if there is mental health scarring effects of youth unemployment and if time spent in youth programs has less of an effect than time spent in open unemployment. This is done using the Northern Swedish Cohort, a panel survey following all pupils who studied or should have studied at their last year of compulsory school at age 16 in a medium-sized Swedish industrial town in 1981, and have been re-interviewed with extremely low attrition at age 18, age 21, age 30 and age 42.

2. Labour market scarring and the role of ALMPs for youths in Sweden

To become unemployed at any stage in the life cycle is associated with rather immediate negative economic effects. Unemployment can however also be the start of a subversive process that may end up in social disqualification of the individual in terms of for instance a lower standard of living and limited social contacts. Unemployment is here a critical life course event which might have long term socioeconomic implications. These consequences have largely been tied to short and long term labour market consequences of unemployment experiences where unemployment experiences have been tied to worse future prospects on the labour market, something usually labeled as "unemployment scarring". As for short term labour market effects of unemployment there has historically been substantial support for the existence of duration dependency, where the duration of the unemployment decreases reemployment chances (Blanchard and Diamond 1994).

Unemployment scarring however relates usually to longer term labour market effects of unemployment experiences. Studies have here found long term effects of unemployment on labour market participation and stability. A Swedish register based study of long-term unemployed in 1993 found that 13% did not experience an unemployment free year during the 10 year period studied, and that 16% left the labour market during the period (Strandh and Nordlund, 2008), findings supported by similar findings in international research (Arulampalam et al. 2000, Burgess et al. 2003). The scarring does however not only limit itself to risks of future unemployment, but also has an impact on wage trajectories where unemployment experiences have been tied to long term wage scars. Studies using Swedish data found that as high a proportion as 30% of long term unemployed did not even manage to return to pre-unemployment income levels within ten years from unemployment exposure (Strandh and Nordlund, 2008), and that as short as 10 week unemployment spell on average reduced the wage trajectory by seven percent, an effect that persisted for more than six years (Björklund 1981). The fact that the unemployed are not only exposed to a temporary risk of economic misfortune but also a long term negative wage trajectories is confirmed by a large amount of previous international research (Bender et al. 1999; 1999; Gregory and Jukes, 2001; DiPrete, 2002). Youth here appear sensitive to scarring effects on employment stability in a Swedish setting (Nordström Skans 2004) although the international literature tends to suggest less sensitivity to employment stability but stronger wage scarring effects of unemployment among youths (Mroz and Savage 2006). In the UK the wage scar of unemployment has been found to be about six to ten percent on reemployment and ten to fourteen percent after three years, whereas long-term effects from youth unemployment have been found to be as high as thirteen to 21 percent (Arulampalam, 2001; Gregg and Tominey, 2005).

There are several mechanisms at work that explain unemployment scarring. The main explanations used are that the value of the human capital of the unemployed begins to deteriorate rather soon after entering unemployment and the negative signaling effect that unemployment represents for potential employers (Harkman 1999, Strandh and Nordlund 2008, OECD 2011), but also the discouragement after several rejections in the search for a new job might have a negative impact on the prospects of the unemployed (Regnér, 1997). The risk of unemployment scarring is a concern in relation to all unemployed, but the youngest in the labour market might be particularly vulnerable. Young unemployed often

have a comparably limited human capital stock from the beginning and often lack important networks in the labour market that are otherwise helpful for an effective job search process. This in combination with an understanding of the entry period into the labour market as a relatively sensitive period in the development of young people's identities and socialization into the adult world (Winefield et al. 1993, Hammarström and Janlert 2002) have created needs for adequate policy responses to youth unemployment.

One of the main tools both used and proposed for dealing with young people at risk of labour market exclusion have here been different forms of training, activity and subsidized job placements (OECD 2011). These measures are usually labeled Active Labour Market Policy Measures (ALMPs) to differentiate them from other types of measures that either aim at improving passive matching or to provide more unconditional economic support in the job search process. ALMPs were originally framed in a Swedish context of the 1950s and 1960s as a form of active matching supporting the growing demand for skill change in a fast expanding economy. With the economic crises from the 1970s onwards and the persistence of higher levels of unemployment the basic idea of ALMPs changed in Europe, with the focus more strongly placed on keeping the unemployed busy and preventing the deterioration of their human capital during unemployment experiences. From the mid-1990s ALMPs were more closely integrated into an activation discourse for some unemployed groups (not least long term unemployed youths) as parts of sets of incentives to move social assistance recipients from welfare dependency to unemployment (Bonoli 2009).

ALMPs were from the beginning not designed particularly for youths (Forslund and Nordström Skans 2006). With rising youth unemployment from the late 1970s more programs targeted at youth were created and during the global economic crisis advanced economies, representing all types of welfare regimes, had major ALMP programs specifically directed at youth (OECD 2011). In a Swedish context these types of youth programs were institutionalized during the 1980s, with the inception of ungdomslagen (youth teams) in 1984. This was later followed by the development of new forms of youth programs as well as replacement of the older forms of youth programs. The overarching ambitions of these programs have been as far as possible to avoid open unemployment for youths, with statutes that often have prescribed quick assignment to the youth programs (Sibbmark and Forslund 2005, Forslund and Nordström Skans 2006). For many youths this means that although they may have long unemployment experiences, much of the unemployment

experience might be spent in youth programs. There is however variation in the time spent in open unemployment vis-à-vis youth programs (Forslund and Nordström Skans 2006), since participation in many cases is based on individual choices and local limitations on the availability of places.

If participation in these programs actually does have positive effects it is however not completely clear from previous research and studies of youth programs have reported mixed results. Internationally White and Knight found in a review that while youth programs that rely on wage subsidies on the labour market were connected to increased employment chances, activation within the framework of the public or third sector most likely had negative effects while training and education had mixed effects (2003). These results that were replicated in a Swedish study of youth programs (Forslund and Nordström Skans 2006). The results here do not differ particularly from what has been found for ALMP participation among adults where for instance Heckman and colleagues in an analysis of the field draw the conclusion that their benefits are at best modest, and at worst harmful (Heckman et al 1999). More encouraging conclusions are however drawn in the latest meta-analysis of the field, and there seems to be at least a moderate positive effect of program participation on employment chances (Card et al. 2011).

A substantial problem with previous research in general and the research on participation in youth programs in particular have been the lack of a long term perspective on the effects of program participation. Effects are almost in all cases evaluated after only six months or a year, and only in relation to reemployment. When measuring effects rather soon after the end of a program positive effect may not yet have become evident. If we wish to evaluate the effects of ALMPs on limiting unemployment scarring it is necessary to have both a long term perspective and to take account of more outcomes than reemployment. In a ten year study of program participation among long term unemployed the positive labour market effects of ALMP-training were for instance found to be very small initially, but the positive effects (increased chances of labour market inclusion, labour market stability and post unemployment incomes) kept improving many years after participation (Strandh and Nordlund 2008). To maintain this long-term perspective when discussing unemployment scarring as well as the benefit of ALMPs is of course particularly important when it comes to youth. This group has normally a very long period ahead on the labour market and research points to how educational measures are important for unemployed young to maintain and

increase their chance of employability and to land in labour market stability in the long run (see for instance Gregg 2001; Hammer 1997; Nordlund, 2011).

3. Unemployment and mental health scarring

Together with the great interest in labour market scarring researchers within sociology, psychology and public health have long been interested in health consequences of unemployment experiences. The conclusions that can be made from this research is that although there obviously is health based selection into and out of unemployment (see for instance Schaufeli and Van Yperen 1992, Clausen et al. 1993, Mastekaasa 1996), there also exists causal negative effects of the unemployment experience on health in general and mental health in particular (McKee-Ryan et al. 2005, Paul and Moser 2009). A great number of high quality longitudinal studies have over the last thirty years shown strong negative effects of unemployment on mental health through following individuals into unemployment or out of unemployment (see for instance Warr & Jackson 1983, Kessler et al. 1989, Korpi 1997, Patterson 1997, Murphy and Athanasou 1999, Strandh 2000, Clark 2003, Dockery 2005, Hald-Andersen 2009).

This research has also developed a theoretical understanding of stressors connected with unemployment that explain these effects. The most common avenue has been deprivation theory, which in its original form looked at latent functions of employment typically missing when unemployed. Employment is here seen as providing time structure, social contacts, facilitating participation in collective processes, yielding status and identity and forcing regular activity in a way that has a positive impact on mental health (Jahoda 1982). An alternative to this perspective has been a more agency based perspective that looks at how the unemployment situation limits the agency of the individual through limitations on the ability to plan ahead or even anticipating what the future might be and the limitations derived from poverty. These limitations are central for understanding the negative effects of unemployment on mental health (Fryer 1986, 1992). These perspectives have in empirical research been found to be complementary and different forms of syntheses of the perspectives have been found to be useful (see Ezzy 1993, Nordenmark and Strandh 1999).

A problem with this research has however been the almost exclusive focus on direct and short term effects of unemployment on mental health. Whereas the research on labour market scarring typically has had a long term focus research into unemployment and mental health has very much focused on immediate effects, with the assumption that reemployment largely restores mental health to pre-unemployment levels. This perspective resembles assumptions within psychological set-point theories where long term stable levels of psychological well-being are seen as mainly dependent on personality traits. Traumatic events will lead to reactions but over time individuals will adapt and revert to the baseline level (see for instance Heady and Wearing 1992, Diener et. al 1999). Research on unemployment and mental health has generally not suggested such a psychological adaptation. Duration of unemployment does in fact instead seem to be connected with a plateau or further deterioration (see for instance Hammarström and Janlert 1997, Strandh 2000, Dockery 2005).

Despite research showing improvements in mental health upon reemployment (see for instance McKee-Ryan et al. 2005, Strandh 2000) it is here possible that this recovery is only gradual or that it will not be complete, meaning that there could be scarring effects of unemployment on mental health. Such scarring fits life course epidemiological perspectives where exposure to living conditions is related not only to current, but also future health. From the perspective of youth unemployment and mental health, this perspective becomes even more interesting as the main models for understanding transmission bases itself on assumptions of critical periods, where early exposure is of particular importance for later health, or disadvantageous social conditions accumulating over the life course (Lynch and Davey Smith 2005, Pollitt et al. 2005). From both perspectives the effect of youth unemployment on later mental health could be particularly strong. Youths entering the labour market could be at a relatively sensitive period in the development of identity and the socialization into the adult world (Winefield et al. 1993, Hammarström and Janlert 2002). Exposure to the stressors of unemployment during such a sensitive phase could according to cognitive activation theory of stress lead to diminished long term coping and experienced hopelessness or learned helplessness (Ursin and Eriksen 2010). Alternatively the labour market scarring effects could lead to "social chain reactions" (Kuh et al. 2003) where the initial unemployment experience leads to a less optimal socioeconomic career and exposure to conditions not conducive to good mental health, than what would otherwise be the case.

If youth unemployment does have longer term mental health scarring effects we might be severely underestimating the mental health costs of youth unemployment. There exist a few longitudinal studies with good baselines that suggest that this might be the case. Looking at relatively short term studies, following individuals up to four years after exposure, there are panel studies of youth from Australia, New Zealand, Sweden and the U.S as well as a German adult sample which indicate that past unemployment is related to worse mental health (Hammarström et al. 1988, Winefield et al. 1993, Goldsmith, Verum and Darity 1996, Fergusson, Horwood and Lynskey 1997, Clark, Georgellis and Sanfey 2001). Especially interesting is here perhaps the findings of Lucas et al. regarding life satisfaction. They found strong immediate effects and a gradual adjustment back towards individual baselines. The adjustment was however not complete and recurrence of unemployment had the same strong immediate effect as the first exposure suggesting that the unemployment experience changed the set point of life satisfaction and created a new baseline level (2004).

These findings do appear to be supported by the few longer term longitudinal studies on mental health scarring of unemployment that have been made. In a study of the British national birth cohort Wadsworth, Montgomery and Bartley followed 5588 men from age 16 to age 33. They find that unemployment between 16-27 has effects on health at age 33 (1999). Hammarström and Janlert (2002), as well as Mossakowski (2009) find similar results in a Swedish 14 year follow up of a cohort of school leavers and a 15 follow up using the American National Longitudinal Study of Youth.

4. Program participation and mental health

The great deal of interest in the effects of ALMP participation on employment chances and unemployment scarring is not matched when it comes to how program participation may affect mental health among the participants in these programs. This is surprising in relation to the interest in proper overall evaluation of the benefits of programs, as governments spend large amounts of economic resources and in many cases emphasize the participation of young the participation of young people in youth programs as preferable to open unemployment. It is however also interesting from the perspective of theories on unemployment and mental health. Previous research has shown activity in different forms to be beneficial for mental health among the unemployed (see for instance Kilpatrick and Trew

1985, Fryer 1986, Muller et al. 1996). This effect is generally understood through the prisms of deprivation theory and agency theory as activity providing alternative roles/identities and being an expression of agency. Participation in ALMPs would here however alleviate both the lack of the suggested latent functions of employment and the restrictions on agency in a much more systematic way. Program participation provides time structure, social contacts, facilitate participation in collective processes and secure regular activity. Similarly the participation in ALMPs is meant both to provide new skills as well as steering unemployed towards occupations and branches of industry where opportunities exist. This should increase both competitiveness, sense of control and confidence for the future (Hallsten et al. 1999, Strandh 2001).

Together these characteristics of ALMP participation can be argued to suggest that there generally should be positive effects on mental health of participation (Strandh 2001, Creed et al. 2001), effects that could be both short and long term. A review of short term vocational interventions found five studies that could be used in the analysis, which showed only weak support for reduction in mental distress (Audhoe et al. 2009). Evaluation studies looking at particular courses have however found more positive results (Vuori & Vesalainen 1999, Vastamäki et al. 2009, Creed et al., 2001). The findings from large scale panels have however been mixed. In a one year follow up study of a large sample of adult Swedish unemployed that looked at participation in three different types of ALMPs, vocational training, activation and workplace participation, only workplace participation was found to have positive effects on mental health (Strandh 2001). This negative result was essentially replicated in a large cross-sectional study of unemployed adult Danish social assistance recipients (Breidhal and Clement 2010), and in a Swedish study based on a youth cohort (Reine et al. 2011). These findings contrast with findings in a Swedish panel of adult unemployed (Korpi 1996) and longitudinal analyses of adult unemployed in the British Household Panel Survey (BHPS) that both found improved subjective well-being among unemployed vocational training participants (Andersen 2008). Andersen's study is methodologically perhaps the most interesting within the field as it contained multiple repeat measurements, both before and after unemployment experiences, and her findings also indicated that the positive effects on mental health remained after participation ended although the positive effect decreased over time.

Previous research into the mental health effects of participation in ALMPs is thus relatively inconclusive, and there is a need for more research particularly relating to how youth are affected by participation. Despite being a focal group for ALMPs little longitudinal research has looked at mental health benefits of participation among youths and there is a dire lack of long term analyses of effects. These are severe deficiencies within the field. Young unemployed and their participation in youth programs is really a special case as compared to the situation of older unemployed. Older unemployed are typically in open unemployment for extended periods of time before entering ALMP programs. The reason for this is that program participation could hinder efficient job search, and participation is thus to some degree an acknowledgement of search failure. ALMP- participation will here be an intervention into open unemployment, and is also analyzed accordingly in the research. The situation for youth is however quite different. The aim is to minimize time in open unemployment (this is clearly so in Sweden), that is assumed to be particularly harmful for youth, and programs can be available early on. This means that youth programs in effect often do not represent an intervention into open unemployment as much as an alternative form of unemployment with different characteristics. A substantial proportion of youths with unemployment problems are never openly unemployed or so only for a very short time. Taking this into account means that it becomes interesting also to investigate it as an alternative form of unemployment and the central question will then be if time spent in youth programs has the same or less negative effects on mental health as compared with time spent in open unemployment.

The lack of long term studies is also a particular problem when it comes to evaluating the benefits of youth programs. Both the rather large literature on labour market scarring of unemployment, and the much more limited literature on mental health scarring, suggests the importance of taking a long term perspective on the effects of unemployment. This might be particularly important for youths. The youth period of transition into the labour market have been suggested to be a psychologically sensitive phase at the same time as any negative effects of unemployment on the subsequent labour market career per definition will have a longer time to play out. A proper evaluation of negative mental health effects of time in open unemployment vis-à-vis time spent in youth programs should thus be made not only short term, but from a life course perspective where mental health scarring of different forms of early unemployment exposure is followed over the life course.

We will in this chapter try to add to previous research by making an initial investigation into how exposure to time in open unemployment and time in youth programs between the ages of 18-21 are related to psychological problems both relatively close to the exposure, at age 21, but also if there are effects in the longer term looking at ages 30 and 42.

5. Data and methods

The main reason for the lack of studies looking at both short and long term mental health scarring of unemployment is the lack of large scale data that will support such studies. The need for good pre-unemployment mental health baselines together with follow up over extended periods of time is both relatively expensive and tends to lead to substantial attrition of the panel. In this study we make use of the "Northern Swedish Cohort" (NSC), a prospective cohort study that includes all pupils who at age 16 in 1981 attended, or should have attended the last year of compulsory school in a medium-sized industrial town in the north of Sweden. This cohort of 1083 participants were investigated using a comprehensive questionnaire containing more than 90 questions covering areas such as somatic and mental health, health behavior, labour market experiences, family situation. The participants were then revisited with the same questionnaire at ages 18, 21, 30 and most recently at age 42. The attrition of the cohort has been extremely low and at the 26 year follow-up (at age 42) 93.9% (n=1006) of those alive in the original cohort were still participating. The survey data have also been complemented with register data from the Longitudinal Integration Database for Sick Leave and Labour Market Studies (LISA), which provides detailed information on labour market participation and use of different welfare systems from 1991 to the present.

The Regional Ethical Review Board in Umeå, Sweden, approved the data collection and this study.

5.1 Variables

5.1.1 Unemployment and participation in youth programs

In order to measure exposure to the two different forms of youth unemployment of interest in this study we use a battery of questions where respondents at age 21 report the number of weeks they have been employed, studying, openly unemployed or participated in labour market programs since the last interview at age 18. From this we have constructed two exposure variables measuring accumulated exposure to the two different forms of unemployment between ages 18 and 21. The result was two continuous variables: 1. *Accumulated months in open unemployment 18-21* and 2. *Accumulated months in youth programs 18-21*. As can be seen in Table 1 youth unemployment was in Sweden of the 1980s, despite generally very low unemployment levels, a relatively common experience. Among the respondents 38.6% had 1 month or more of exposure to open unemployment, while 47.4% had 1 month or more of exposure to youth programs between the ages of 18-21 with mean values of 6,24 months for open unemployment and 12,8 months for youth programs.

It is interesting to note that a substantial proportion of those who experienced open unemployment did not participate in youth programs and vice versa. As can be seen there is a moderately strong correlation between the two types of unemployment in the population but the correlation is not significant within the exposure population (those with unemployment experiences).

Table 1. Mean of Psychological Problems Index (age 16, age 21, age 30 and age 42), Unemployment exposure 18-21, Proportion gender, parental class age 16, parental employment age 16

Variables	
	Mean (SD)
Psychological Problems (PPI) age 16 (n=989)	4,53 (1,37)
Psychological Problems (PPI) age 21 (n=990)	4,41 (1,39)
Psychological Problems (PPI) age 30 (n=959)	4,48 (1,47)
Psychological Problems (PPI) age 42 (n=985)	4,69 (1,81)
Unemployment exposure 18-21 (n=995)	**Proportion**
Open unemployment >1 month 18-21	38,6
Participation in youth programs > 1 month 18-21	47,4
	Mean (SD)
Months in open unemployment 18-21	6,24 (8,15)
Months in youth programs 18-21	12,8 (14,63)
	Pearsons
Months open by Months program (total pop)	0,18***
Months open by Months program (exposure group)	0,07
	Proportion
Gender (n=1001)	
Women	48,0
Men	52,0
Parental class (age 16) (n=1001)	
Both Blue Collar	35,7
One Blue Collar one White Collar	33,6
Both White Collar	30,8
One parent not in employment (age 16) (n=1001)	
No	69,5
Yes	30,5

5.1.2 Mental health

The North Sweden Cohort provides a number of items that could be used to measure mental health problems. In this study we have elected to use a composite index of prevalence of three psychological symptoms during the last year. This combines the prevalence of nervous symptoms, depressive symptoms and sleep problems on a scale— from 0 (never) to 4 (constantly), during the last year. The combination of items is empirically supported in factor analyses and has in previous studies been found to represent a good steady state measure of psychological problems . This index, which we will call "Psychological Problems Index" (PPI) was created for ages 16, 18, 21, 30 and 42 and as can be seen in Table 1 the mean value of the index is relatively stable over the years although it is somewhat higher at age 16 and in particular at age 42. The index is negatively skewed which might be problematic for linear analyses. Alternatives such as dichotomization as well as log transformations have been tested and found to produce the same substantive results. This led us to keep the original linear variables as they have the benefit of providing directly interpretable coefficients.

5.1.3 Additional control variables

The focus on unemployment and program participation 18-21 means that controls in the study are related to pre-unemployment fixed variables. Here the study found effects on PPI of three background variables that subsequently were included as controls. These were gender (woman or man), Parental social class at age 16 (Both blue collar, One Blue Collar one White Collar, both white collar) and parental employment situation at age 16 (at least one parent not in employment or both parents in employment). Other background factors such as contact with parents at age 16 and parents divorced at age 16 were dropped because of non effect or multicolinearity with included controls.

5.2 Statistical analyses

The chapter uses simple Pearson correlations for original descriptions of the relationship between our two exposure variables and mental health at ages 16, 18, 21, 30 and 42. In order to investigate the effects of exposure to the two forms of youth unemployment over the life course we need to use data longitudinally as repeated measures. Ordinary OLS -

regression is here not suitable for the analysis of repeated measures where data from the two points in time can be expected to be correlated. For instance, we can here expect there to be substantial variation between individuals when it comes to the normal level of mental health. This variation in the normal level of mental health might, if not taken into account, muddle the effect of exposure. The chapter uses a repeated- measures linear mixed models approach with random intercepts. Linear mixed models is an extension of the General Linear Model (GLM) that allows error terms and random effects to have correlated variability. The repeated measures mean that the model analyses within-subject effects of exposure on repeated observations, and the random intercept assumes that individuals have different intercepts. In the tables 2 models are presented. In the first the two exposure variables are introduced and in the second the fixed control variables are added. All analyses were also tried using OLS-regression where baseline mental health at 16 was controlled for. Results were substantively similar although both effects and standard errors were substantially higher.

6. Results

The purpose of this chapter is to investigate how exposure to time in open unemployment and time in youth programs between 18 and 21 affect mental health both relatively close to the exposure and in the longer run. In Table 2 we begin this by looking at the simple bivariate correlations between exposure to our two forms of youth unemployment and mental health prior to exposure, at ages 16 and 18, as well as after exposure, at ages 21, 30 and 42. What we firstly can see is that there appear to be no or only weak correlations between exposure to the two forms of youth unemployment and the Psychological Problems Index (PPI) before the actual exposure at ages 16 and 18. There is no correlation between exposure to open unemployment between 18-21 and PPI at 16 and 18, while exposure to participation in youth programs has a weak but statistically significant correlation with PPI at 18 only. This indicates that the mental health selection, as measured by PPI, into open unemployment probably is very small while there seems to be at least some mental health based selection into participation in youth programs. That there does not seem to be strong selection effects into the two forms of unemployment is important as

it indicates that any statistical differences in PPI at later ages are less likely to be the results of exposed individuals having higher baseline mental health problems.

Table 2. Correlations (Pearson) between unemployment exposure 18-21 and Psychological Problems Index (age 16, age 21, age 30 and age 42),

	PPI age 16	**PPI age 18**	**PPI age 21**	**PPI age 30**	**PPI age 42**
Months in open unemployment	0.03	0.05	0.21***	0.12***	0.11***
Months in youth programs	0.05	0.07*	0.11***	0.06*	0.09**

Levels of significance: ***=0,001-level; **=0,01-level; *=0,05-level

Turning to the correlations post exposure, i.e. at age 21 and older, we find a partly different picture. Starting with looking at exposure to open unemployment we can see that there is a statistically significant correlation with PPI directly after exposure at age 21, this correlation is halved but remains significant at both ages 30 and 42. Given that there appeared to be relatively little selection PPI related selection into open unemployment this would appear to indicate that exposure to open unemployment as a youth is related to relatively strong short term mental health scars and that these drop over time but remain during the life course. Looking at the participation in youth programs we can see that there are statistically significant correlations at 21, which as was the case with exposure to open unemployment, remain but are lower at ages 30 and 42. This would seem to indicate that there is mental health scarring effects also of participation in youth programs, but that this effect is lower than for exposure to open unemployment.

To draw conclusions about effects of exposure to our two different forms of youth unemployment on mental health during the life course from correlations would however be questionable. There are many factors that could lead us to draw the wrong conclusions. We for instance already know that there appear to be some form of selection related to PPI into at least participation in youth programs, something which raises the question if the correlations found for this variable are related to exposure or pre-existing differences. In order to avoid partly these issues and take the analysis a step further we have in Tables 3, 4 and 5 used a repeated measures mixed models approach to analyse within-subject effects of exposure at the three post exposure ages.

In Table 3 we start by looking at the effect of our two different forms of youth unemployment on PPI relatively close to exposure at the age of 21. What we can see looking at the first model where only the exposure variables are introduced is that there appear to be a relatively strong and statistically significant effect of exposure to open unemployment between 18 and 21 on PPI at 21. This is however not the case with exposure to participation in youth programs between 18 and 21 where no statistically significant effect is found. This situation is, as could be expected given the within individual approach, not affected in a substantial way by the introduction of our fixed control variables in model 2. The findings of strong correlations between exposure and PPI at age 21 in table 2 thus appear to be connected with actual effects of exposure to open unemployment but related to health based selection in the case of exposure to participation in youth programs.

Table 3. Mixed models, Psychological Problem Index (ages 16 and 21) in relation to different kinds of unemployment experiences 18-21 (repeated measures, random intercept).

	Model 1		**Model 2**	
	B	95% CI	B	95% CI
Exposure variables				
Months in open unemployment 18-21	0.037***	0.023-0.049	0.039***	0.025-0.054
Months in ALMP-measures 18-21	0.001	-0.005-0.008	0.002	-0.005-0.009
Fixed variables				
Gender				
Woman (reference)				
Man			-0.41***	-0.53—0.29
Parental class (age 16)				
Both Blue Collar(reference)				
One Blue Collar one White Collar			-0.001	-0.14-0.16
Both White Collar			0.007	-0.15-0.16
One parent not in employment (age 16)				
No (reference)				
Yes			0.17*	0.04-0.30
Intercept	4.42	4.35-4.49	4.75	4.52-4.98
-2LL	6818		6798	

Empty model: -2LL=6838 Levels of significance: ***=0,001-level; **=0,01-level; *=0,05-level

Looking at more long term scarring effects in Table 4 where the effect of exposure to our two forms of youth unemployment on PPI at age 30 is analysed we see a very similar pattern to that found in table 3. There is a statistically significant effect of exposure to open unemployment between ages 18- 21 but there is no such effect of exposure to participation in youth programs between ages 18-21. This is not changed by the introduction of the fixed control variables. An important difference however is that the effect of exposure to unemployment on PPI at age 30 is substantially lower than what we found for exposure to open unemployment on PPI at age 21. This would seem to suggest that there exist long term mental health scarring effects of exposure to open unemployment as a youth, but that this effect is somewhat lower than the shorter term effect.

Table 4. Mixed models Psychological Problem Index (ages 16 and 30) in relation to different kinds of unemployment experiences 18-21 (repeated measures, random intercept).

	Model 1		**Model 2**	
	B	95% CI	B	95% CI
Exposure variables				
Months in open unemployment 18-21	0.021**	0.007-0.035	0.021**	0.007-0.036
Months in ALMP-measures 18-21	0.001	-0.006-0.007	-0.001	-0.008-0.006
Fixed variables				
Gender				
Woman (reference)				
Man			-0.44***	-0.58—0.30
Parental class (age 16)				
Both Blue Collar(reference)				
One Blue Collar one White Collar			0.00	-0.16-0.16
Both White Collar			-0.06	-0.12-0.24
One parent not in employment (age 16)				
No (reference)				
Yes			0.11	-0.04-0.27
Intercept	4.48	4.41-4.55	4.75	4.47-5.02
-2LL	6819		6793	

Empty model: -2LL=6833 Levels of significance: ***=0,001-level; **=0,01-level; *=0,05-level

Finally, in Table 5, we look at PPI at age 42 which is over 20 years after the exposure to our two forms of youth unemployment. We here find a statistically significant effect of exposure to open unemployment between ages 18-21. This effect appear to be, if anything stronger than at age 30, although substantially weaker than at age 21. The big difference as compared with the previous analyses is however that there is a weak, but statistically significant, effect of participation in youth programs on PPI at age 42. This pattern is not affected by the introduction of our fixed control variables in model 2.

Table 5. Mixed models Psychological Problem Index (ages 16 and 42) in relation to different kinds of unemployment experiences 18-21 (repeated measures, random intercept).

	Model 1		**Model 2**	
	B	95% CI	B	95% CI
Exposure variables				
Months in open unemployment 18-21	0.028**	0.009-0.046	0.028**	0.009-0.046
Months in ALMP-measures 18-21	0.010*	0.002-0.019	0.009*	0.000-0.017
Fixed variables				
Gender				
Woman (reference)				
Man			-0.55***	-0.70—0.40
Parental class (age 16)				
Both Blue Collar(reference)				
One Blue Collar one White Collar			-0.03	-0.21-0.14
Both White			0.13	-0.31-0.06

Collar				
One parent not in employment (age 16)				
No (reference)				
Yes			0.09	-0.07-0.26
Intercept	4.54	4.46-4.61	4.69	4.47-4.93
-2LL	7380		7336	

Empty model: -2LL=7407 Levels of significance: ***=0,001-level; **=0,01-level; *=0,05-level

Table 4 thus would seem to indicate that there is substantial long term mental health scarring effects of exposure to open youth unemployment, but there might also be smaller long term scarring effects of participation in youth programs. A possible reason for the differences found when looking at age 42 could be that the mean for PPI is higher this year. This could be related to a greater scope for differences at age 42, resulting in coefficients that are a little stronger. If there is a weak mental health scarring effect of participation in youth programs this effect would then only turn up when differences are somewhat larger.

7. Conclusions

Despite substantial research into the effects of unemployment on mental health very little research has looked at longer term effects of unemployment experiences on mental health. There has also been very little research devoted to looking at the mental health effects of participation in youth programs vis-à-vis open unemployment, something which this paper has argued could be regarded as another form of youth unemployment. Both of these issues are important for evaluating the short and long term costs of youth unemployment and the possibilities to mitigate these costs for both the individual and society. This chapter has been an attempt to add to previous research by making an initial investigation into how exposure to time in open unemployment and time in youth programs between the ages of 18-21 are related to psychological problems both relatively close to the exposure, at age 21, but also if there are effects in the longer term looking at ages 30 and 42.

The results from the chapter indicate that there are strong negative effects of open unemployment on mental health in the short perspective, with strong scarring effects at age 21. Exposure to open youth unemployment however also appeared to leave long term mental health scars visible at both age 30 and age 42. These long term scars were at a lower level than what was observed at age 21 but both significant and stable over time. These findings indicate that there are both short and long term mental health scarring effects of at least open youth unemployment. This conclusion is important as it does tell us that we although the general concern about the destructive nature of youth unemployment may actually underestimate the costs of youth unemployment for individuals and society. We do however leave open for further research which mechanisms that cause these effects. There are here at least two possible general explanations that we see as viable and promising for further research. Firstly it could be a case of the unemployment experience actually lowering the mental health set point, creating a new and lower base line level as suggested by Lucas et al. (2007). In this case it could be a general phenomenon or related to youth as a sensitive period in the development of identity and socialization into the adult world. Secondly it could be related to social chain reactions. Where initial unemployment experiences lead to a suboptimal socioeconomic career containing situations and experiences related to lower mental health.

The other main conclusion that can be drawn from this chapter is that it appears as if our other type of youth unemployment, participation in youth programs, does not cause the same negative short and long term mental health scarring. We here found effects to be non-existent both at the age of 21 and at the age of 30, while we found an effect that was smaller at the age of 42. There is also some indication of this weak effect at age 42 might be caused by selection into participation in youth programs. In further analyses not presented here the inclusion of PPI at 18 as an additional reference point remove this effect for participation in youth programs but does not affect the effect of open unemployment. This paper does also leave the mechanisms for why participation in youth programs do not have the same negative mental health scarring effects as open youth unemployment open for further research. We can here see that it could be related to maintaining the level of mental health in unemployment through mitigating some of the destructive psychological features of the unemployment situation. Alternatively or additionally it could affect the life course on

and off the market by affecting capabilities necessary for leading a successful life both on and off the market.

Regardless of the mechanisms involved we regard this finding of lower negative mental health scarring of participation in youth programs as important for policy choices to be made regarding how to deal with high levels of youth unemployment across Europe. Considered and consistent active labour market policy directed at youths might actually lower the short and long term mental health costs of youth unemployment. This is something that might be of importance not only in relation to individual mental health, but to the long term prospects off and on the labour market for a generation of European youths facing high unemployment once the labour market recovers.

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E. Class, education and non-market capabilities: A longitudinal study of parental social class, education and the non-market capabilities of subjective health, voice and agency

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1. Introduction

The European experience that has followed the global economic crisis has demonstrated the vulnerable position of youth in general. The economic crisis has had a particularly strong impact on the life course of the generation about to enter adulthood and although unemployment in general has increased strongly youth unemployment has increased by more than double that of adult unemployment. The expectations are also that this problematic labour market situation for youth will stay with us for a long time (Scarpetta et al. 2010). Education has here been seen as a central tool to further labour market and social integration of youth through a focus on increasing employability and human capital. The focus on acquiring and maintaining marketable skills and knowledge are of course central for the well-being of youth that are entering adulthood under trying circumstances. The rapid pace of change of labour markets and society might however create an increasing importance on issues such as sustainable employability during the life course. For youth to be properly prepared for adult life in such an environment places additional demands on flexibility and autonomy in relation to both labour market and society. This is important both for the welfare of the individual but also for the long term sustainable development of democratic societies in an era of global competition.

Drawing on the capability approach (Sen 1980, 1999) we suggest that education can play such a critical role for full and effective social participation as well as the adaptability to a rapidly changing world of work. Education must thus be evaluated from the perspective of how it can help to convert potential resources and opportunities into capabilities that are of relevance for conducting a flourishing life. From this perspective an analysis of educational outcomes must not limit itself to manifest outcomes such as employment and income but must also take into account how educational participation function to activate critical factors for a good life such as the capabilities for voice, autonomy as well as for good health. The capability approach also puts a clear focus not only on what individuals can do, but also on

who they are, which raises issues about for whom education has what effects. Education and differences in education is of importance for reproducing social inequalities but could also be of differential value for realizing capabilities relative to the preconditions of the students. In this chapter we use a youth sample taken from the Swedish Survey of Living Conditions (Undersökningarna om Levnadsförhållandnen – ULF) to longitudinally investigate the relationship between social background in the form of parental social class, educational attainment and the non-market capabilities of Voice, Autonomy and Health.

2. Outcomes of education

The economic growth and extended opportunities that followed World War II were built on a model of nationalism, aimed to spread the benefits to the majority rather to a privileged few. The promise arose from a belief that investments in knowledge and skills would deliver prosperity, justice, and social cohesion. As a result, the number of years in education have increased greatly across all OECD countries (OECD 2010) during the past 30 years, and in contemporary society education has played an increasingly important role as regards employability (see for instance Bynner at al. 2003; Danziger and Ratner 2010). For young people the ability to gain stable work that can provide economic resources is central, and it is often viewed as the most significant marker of a successful transition to adulthood (Danziger and Ratner 2010). Owing the importance of education in today's society, we find a large body of literature on educational outcomes, showing positive effects on, for example, labour market career (Biagi and Lucifora 2008; Nordlund, Stehlik, and Strand 2012; Van der Velden and Wolbers 2007) economic situation (Danziger and Ratner 2010; Strandh 1999; Van der Velden and Wolbers 2007), and unemployment (Biagi and Lucifora 2008). We thus know that young people with a university education always had more success on the labour market compared with peers with only an upper secondary school qualification or less, and the disparity has become even greater in recent decades (Biagi and Lucifora 2008).

However, following the economic recession in the 1980s we have witnessed increased unemployment in large parts of Europe, and rising numbers of university graduates face an uncertain economic and labour market situation (Tåhlin 2007; Åberg 2002; 2003). This has intensified the discussion within educational research about over education and mismatch, and the relationship between credentials and performance has been called into question.

Arguments are put forward that the educational explosion, underpinned by notions of equality, has had a huge negative impact on the value of education (Brown, Lauder, and Ashton 2010), leading to a decline of the positive labour market effects if not corresponding changes on the labour market come about (Alvesson 1999; Wielers and Glebbeek 1995).

Theoretically educational outcomes are generally understood from the perspective of human capital theory with its roots in the 1960s. Investments in knowledge and skills would deliver prosperity, justice and social cohesion, and due to the educational explosion every individual in the western societies is assumed to have an equal chance (Brown, Lauder, and Ashton 2010). In human capital theory education is linked with higher production and national economic growth due to the assumption that productivity mostly depends on the skills of the workforce (Becker 1993). Higher education extends human capital, i.e. individual knowledge and capabilities (Becker 1993), leading to both higher productivity and improved income for the employee (Wielers and Glebbeek 1995). However, some argue that the assumption of human capital returns to the employees rests on an outdated understanding of the global economy, and due to globalization and greater outsourcing opportunities a reduced amount of wealth is distributed back to the workers and progressively more to the shareholders (Brown, Lauder, and Ashton 2010). Moreover, the values of educational investments are in the human capital theory often narrowed down to labour market outcomes, seen as determined by the logic of benefits and costs.

This is reflected in the state of the art of research on educational outcomes, which largely relates to the market outcomes of education discussed above. Unquestionably these outcomes are vital; however there could be other aspects of education that might be connected to good human life, such as gender relations, health and democracy. Education could, for instance, provide the individual with skills that go beyond economic returns and employability, such as the capability to participate and act as a full citizen in a democratic society. Furthermore, due to the educational explosion and the notion of equal educational opportunities, a broader framework that includes both the individual's resources and her/his possibilities must be used when educational outcomes are investigated. In the capability framework (see e.g. Sen 1980; Sen 1999), the emphasis shifts from goods to what goods do to individuals, that is, from education to outcomes of education. A solitary exploration of gross national product growth or the rise of individual income is not sufficient when discussing outcomes of education from this perspective; other dimensions such as social and

economic circumstances and political and social rights must be included in the analysis (Sen 1999). The focus on what individuals are actually able to do and be is a core characteristic of the capability approach (Robeyns 2005), and stands in contrast to theories that focus on economy or labour market attachment. From a capability perspective, good human life is more than the sum of a society's GDP; it also includes the prospect to grow in areas of democracy and health, to enjoy equality and happiness, to be able to reflect on society, to think critically and participate in debates. Education can also be seen as an individual resource to achieve some degree of autonomy, having the freedom to lead the life one wants to lead, individuals' capacity to be included and act as full citizens in a democratic society, and to be the person one wants to be, be "someone who acts and brings about change" (Sen 1999:31).

2.1 Non-market outcomes of education as capabilities - previous findings

By transforming the idea of education as an economic investment to an educational system dedicated to enhancing the quality of life would most likely bring new understandings and interpretations of the educational expansion. Although most contemporary research primarily addressed the education – market linkage, some studies have been carried out as regards the non-market effects of education. When exploring these individual and societal non-market outcomes of education the focus has typically been on attitudes and health outcomes (Babones 2010; Cutler and Lleras-Muney 2006; Michalos 2008; Ross and Mirowsky 2010; Ross and Wu 1995; Ross and Mirowsky 2006; Walberg and Tsai 1983) which have given us a relatively good understanding of the positive relationship between education and health, as well as information on the relationship between education and attitudes.

Although there is no specific focus on capabilities in these studies the findings do connect with capabilities identified in previous literature. Being able to have good health is a value onto itself, is a prerequisite to many functions and has been identified as a central capability (see for instance Nussbaum 2003). Previous research using both cross-sectional and longitudinal data have here found substantial and long-term association between higher education and improved health status (Ross and Wu 1995). This association has been reported in many countries, during different time periods, and for a variety of health issues (Babones 2010; Cutler and Lleras-Muney 2006; Ross and Mirowsky 2010; Ross and Wu

1995). Individuals with higher education are less likely to suffer from anxiety or depression and they spend fewer days in bed because of poor health. Similarly, strong statistical links have been found between education and self-reported happiness, mortality, heart disease, and the risk of diabetes (Michalos 2008; Walberg and Tsai 1983).

Other studies have pointed towards effects of education on capabilities connected with self-governance, where the individual's ability to be an actor or "someone who acts and brings about change" (Sen 1999:31) is central. The ability to bring about change i.e agency can be understood as a social process in which the individual can contextualize past experiences and habits and imagine and act towards alternative possibilities of the future within an unforeseen present (Emirbayer and Mische 1998). This is intimately connected with the capability of voice which is a central factor for the purpose of political justice (Anderson 1999) and ideally is a major part in an equal inclusion of all citizens in a democratic society (Bonvin and Thelen 2003). From the perspective of voice and agency we have some previous cross-sectional findings linking education to civic knowledge as well as greater political awareness, participation (Milner 2002; Murray 2009; Weakliem 2002; Verba, Schlozman, and Brady 1995), motivation to vote (Milner 2002; Verba, Schlozman, and Brady 1995) and the propensity to blindly accept authorities (Bobo and Licari 1989; Bynner et al. 2003). This strand of research has also shown cross-sectionally that more highly educated people express less intolerant views on moral issues and are more open-minded towards others. Moreover, education weakens religious values but strengthens democratic values (see e.g. Hall et al. 1986; Kalmijn and Kraaykamp 2007; Weakliem 2002).

2.2 Education and social class

Education thus offers benefits to the individual; greater job opportunity, higher wages but also a healthier life and perhaps affects both voice and agency. Concluding that this is the case however raises the question of what role it plays for maintaining existing inequality as well as if it is of similar importance for individuals with different backgrounds. That individuals are unequally located within a structure of social power is the essence of a stratification perspective. Social power can be perceived as the set of resources individuals have to enable or constrain their actions. Using a social stratification perspective, one seeks to investigate and explain the bases of shared positions of social power, were social class is

often regarded as one of the main bases (Breen and Rottman 1995). The opportunities an individual has to gain access to valued outcomes can be understood as life chances. Members of a social class are thus regarded as sharing common life chances (Weber, 1978; Wright 2005; Bourdieu, 1977; Halleröd and Westberg 2006). Within a class perspective, parental resources play an important role for youth's choices and opportunities seen as viable (Halleröd et.al 2006).

The issue of how social class structure the life chances through affecting educational attainment and outcomes tend to be neglected from a human capital perspective as an unequal distribution of resources depends more on what individuals actually can do and to a lesser extent on who they are (Erikson and Goldthorpe 1992). The educational system can however also be thought to reproduce the class structures of society by favouring students from the upper classes and guiding them into the educational system, thus giving them entrance to the leading positions in the society (Bourdieu and Passeron 1977). The process that drives the reproduction is to be understood as social adaptation, leading to a situation where economic, social and political hierarchies in society are seen as natural and taken for granted both the dominant and the dominated. Class structures and collective interests are thus both produced and reproduced by individuals within the system (Layder 2006), and due to the illusion of equal opportunities; students from a less privileged background perceive the lack of success as a personal failure (Andersen and Kaspersen 2003).

Empirically it is here clear that educational opportunities are unevenly distributed among socio-economic groups in society (see for instance: Almqvist et.al. 2010; Erikson et.al. 1993, 1996; Erikson and Rudolphi 2010; Erikson, Goldthorpe, Jackson, Yaish, & Cox, 2005; Gustafsson 2000). Inequality in educational attainment is often considered as a main disparity of individual's future life chances (Breen 2011). This unequal distribution can be noted throughout the educational system, but becomes even more compelling when students makes their choice about upper secondary and tertiary education. Research has shown that individuals from less advantaged origins perform less well in school and to a lesser extent proceed to the next level of education than individuals from a higher class origin (Erikson et.al 1996). School reforms have in Sweden, probably more than in other European countries, been designed and carried out with an explicit goal of reducing social inequalities in education. Sweden has, in relative terms, a low level of inequality of

conditions. This, together with the combination of far-reaching educational reforms ought to promote equality of opportunities. To some extent, empirical studies have verified this. In Sweden, social mobility has increased and social inheritance is relatively low. (Hällsten 2010; Eriksson et.al 1996). However, Erikson and Jonsson (1996) point to how striking it is that the pattern of social inequality in Sweden is very much the same as in other countries.

2.3 Capabilities, social class and educational outcomes in Sweden

The purpose of this chapter is to make an initial investigation into the relationship between social class, education and non-market capabilities that are central for the possibility to lead a good life. Previous research have here very clearly shown that social class background and education are intertwined and of great importance for the economic and labour market life chances of youth. Less is however known about how these two factors interact to facilitate capabilities that are of less market relevance but of central importance for the ability to lead a good life. Outside of health little longitudinal research have focused on non-market educational outcomes as well as the role education has for transmitting disparities in these capabilities between social classes. We also know very little about how educational effects are apportioned, if education is more important for youths from some backgrounds than from other backgrounds.

In this chapter we will use Swedish longitudinal data to look at how parental social class and individual educational attainment is related to subjective health as well as the two central capabilities of agency and voice. Agency is here understood as the individual's capacity to, to some extent, govern their own life, and voice as the ability to engage in discussions and express one's opinion. The chapter here aims to through available longitudinal data on capabilities provide initial results that can function as a starting point for further analysis on four questions. Are there differences in non-market capabilities between young adults from different social class backgrounds? Does educational attainment affect non-market capabilities? Can differences in non-market capabilities between young adults from different social class backgrounds be understood from differences in educational attainment? Is education of the same relative importance for non-market capabilities for youth from different social class backgrounds?

Sweden here represents an interesting test case for these questions as it is characterized by a relatively high level of equality of conditions. One of the most prominent features of the Swedish education system is that sorting and choice happens relatively late (at age 16) and that education is free at all levels. Students at upper secondary school receive a grant and all students who enter tertiary education can both receive grants and student loans, without reference to socio-economic situation (Hällsten 2010). There has also been a substantial educational expansion which had an explicit target of achieving 50% tertiary education participation by age 25 in each youth cohort (Åberg 2003). These features of the Swedish educational system should enable students from all social classes to participate in tertiary education and should give both initial social sorting and funding relatively less of a role. The economic resources and circumstances within a family can however affect the probability for transition to higher education. Students from more wealthy homes, on an average, receive more financial support during their time of study. For these students the opportunity cost of studying is lower than for students without the same economic backing (Erikson and Jonsson 1996, Hällsten 2010). Individuals from a less advantaged social background are also more debt averse and fear debt to a higher extent, making them more likely to be deterred from entering tertiary education. Individuals from less advantaged background perceive the costs associated more as debt rather than as an investment (Callender and Jackson 2005).

3. Data and methods

In this chapter we use the Swedish Survey of Living Conditions (ULF, Undersökningarna av levnadsförhållanden) compiled by Statistics Sweden. This is an annual individual level survey of living conditions in Sweden that has been has conducted on behalf of the Swedish Parliament since 1975. The Swedish Survey of Living Conditions is based on in person interviews with a random sample of the population aged 16-74. Each year between 6 000 and 7 000 people are interviewed and the response rate for each year has been around 80% deteriorating to 75% since 2000. The questionnaire includes information on multiple dimensions of living conditions such as health, social relations, working life, economy physical environment as well as background information and demographic information on the respondent. The interviews are further supplemented with information on income,

pensions, taxation, student aid, etc. from administrative registers. Each welfare component is composed of a large number of indicators and the data consist of approximately 700 indicators of welfare. Since 1979, a partial panel approach has been used and about half of each years sample is re-interviewed every eight years, with re-interview response rates of around 85 per cent. The panels are updated with new youth cohorts and immigrants each panel wave in order to keep the panel representative. For the purpose of this study we selected all respondents who were still teenagers and participating in one of the surveys 1988-1995, plus re-interviewed in the next wave eight years later, 1996-2003. This selection created an eight year panel youth sample consisting of 1 058 young individuals (528 women and 530 men).

3.1 Dependent variables

The dependent variables in the study relate to subjective health as well as the two central capabilities of agency and voice at the second wave of interviews, when the sample are young adults aged 24-27 years of age. This is an age when most of our young individuals will have completed their educational career, or participated sufficiently long enough for differences in education to be identifiable and for educational effects on our outcome variables being theoretically viable. In order to measure subjective health we use an item where respondents are asked to assess their overall health on a three value scale from 'bad' to 'neither bad nor good' to 'good'. As the sample consists of youths respondents typically are in good health and the variable was recoded into a dichotomous variable indicating if respondents were in good health, or not.

In order to measure the capability of agency we view the capability to appeal against a decision made by the authorities as one expression of agency which can be linked to empowerment and self-determination. We here argue that having the perceived capability to influence authority decisions and thus to some extent shape and control forthcoming conditions can be seen as one manifestation of agency. The survey question here; 'Could you on your own write a letter and appeal against a decision made by the authorities?' could be answered yes or no, and is in the chapter used as a dichotomous variable to denote agency.

The capability of voice is a central factor for the purposes of political justice and for the functioning as equal citizens (Anderson 1999). This includes the ability to participate in political debates and an active involvement in the life of the community. Thus, we would like to argue that whether individuals are active in political discussions or not should be a good indicator of voice. The survey here contains the question *'If you find yourself in a group of people and the conversation comes to political issues, in your view, which of these descriptions most closely applies to you'* which allows four answers, '*Mostly I engage in the discussion and express my opinion'*, '*Usually I do not bother to listen when people start talking about politics'*, '*I tend to listen but I do not engage in the discussion'* and finally, *It happens at times, but not that often, that I express my opinion*. The answers to this question in the sample are relatively evenly distributed between the different categories and in the chapter we use it as a four value scale. Dichotomisations of the variable do however provide the same substantive results as using it as a scale.

3.2 Independent variables

The central independent variables of the study are parental social class and individual educational attainment. For parental social class we here basically apply the Erikson/Goldthorpe measure of social class (Erikson & Goldthorpe 1992), although our class groupings are somewhat unorthodox. This both due to the base variables available for these years in the survey as well as the need to reduce the number of class groupings to simplify analysis. The divisions that are most important as well as those that relate most strongly to different levels of education in the Swedish educational system are however present. We have here created a five category class variable that differentiate: Higher White Collar (service class I), Middle White Collar (service class II), Lower White Collar (Routine Non-Manual IIIa+IIIb), Self-employed and Farming (IVa,b & c) an finally Blue Collar workers (which here includes Lower Grade Technicians, Manual Supervisors and Skilled Manual as well as Semi and Unskilled Manual workers and Agricultural Labourers unskilled V, VI, VIIa, VIIb). The parental social class variable was here based on the fathers social class at the time of the first interview, but complimented with information on the mothers social class when information was lacking. The parental class variable was here very stable and a change to

using highest social class in the household or the social class at the second interview produced very little differences from the variable used.

For education there is very little differentiation at the time of the first interview, when only very few have attained anything but the compulsory level of education. This is of course the result of the age of the cohort at the time of the initial interview, when most respondents are still in upper secondary education. This creates the possibility to use education at the time of the second interview as an indicator of the change (or non-change) of education from the first interview. The article thus uses educational attainment at the time of the second interview as an indication of educational attainment since the time of the first interview. Four different levels of education are here identified in this variable: compulsory school or less (which imply no change from age 16 to 19 as a majority of the respondents, 85 per cent, had only compulsory school or less), two-year upper secondary education, three-year upper secondary education and university studies. The classification is based on the major differences in the Swedish educational system. Compulsory school or less is here of course a distinct group of low-educated individuals, students with two year secondary education have a vocational training, three year secondary education provides a theoretical upper secondary education, and students with university education comprise a distinct highly educated group. In the youth group at age 24 to 27, almost 43 per cent had continued to university, another 30 per cent reported three years of upper secondary education as the highest level of schooling, 17 per cent had two years of upper secondary education while 10 per cent had not continued after compulsory schooling.

In addition to these central independent variables the chapter makes use of a number of control variables. The most important of these are the baseline indicators of our dependent variables. Most studies of non-market outcomes of education have not employed a longitudinal approach. In this study we have access to our dependent variables subjective health, voice and agency also at the time of the first interview. This makes it possible to, to some extent, investigate whether the outcomes represent a change in the dependent variables or merely reflect a situation present also before educational attainment. In addition we use a number of controls that could be thought to be related to educational attainment and/or our outcome variables. Gender (man or woman) could here be related to both as we for instance know that gender is related to social and political participation, self-

determination and health (see e.g. Menezes 2009; Svallfors 2004, Hammarström et al 2011), as well as shape young individuals' educational choices (Lareau and Conley 2008_ENREF_36). Immigration background could here be thought to have similar implications and we here use a variable indicating immigrant background (both parents born in Sweden, one or both parents born outside Sweden) to control for this. The respondent's geographical location within Sweden at the time of the first interview is also controlled for. This as the distribution of education is not geographically equal and youth living in major cities might have easier access to higher education. The areas are classified as follows: cities (greater Stockholm, Gothenburg or Malmö), towns with more than 90.000 inhabitants (municipalities with a population of more than 90 000 and municipalities with a population of more than 27 000 but less than 90 000 as well as more than 300 000 inhabitants within a radius of 100 km), and small town or rural (municipalities with a population of more than 27 000 but less than 90 000 and with less than 300 000 inhabitants within a radius of 100 km and rural). In addition we also use the civil status (single or cohabiting) as well as if the respondent has children (yes or no) at the time of the second interview as controls. For both these variables very few respondents live with partners or have children at the first interview and the variables could be regarded as exposure variables.

3.3 Methods

Multivariate analyses in the chapter are kept relatively simple and use standard techniques. The voice variable is treated as a continuous variable, although it is short, and OLS-regressions are applied. The regression coefficients here represent the estimated difference on the voice scale between the study category and a reference category, all other control variables in the model equal. For the agency and subjective health variables binary logistic regressions are applied. Logistic regression has the advantage that it does not entail a linear relationship between the dependent and the independent variables; neither are there any requirements for normal distribution. This is important as both variables describe either or relationships that can be better understood as probabilities. For the logistic regressions odds ratios for a category in relation to a reference category are presented. The odds ratio here represents the ratio between the odds of agency and subjective not good health for a reference group and the odds for the other categories within each variable, all

other variables in the model constant. An odds ratio of one here represent no difference in odds between the studied category and the reference category, a value below one indicates a lower probability of possessing voice and agency as compared with the reference category and accordingly a value above one means a higher probability.

The questions raised in the chapter led to a stepwise analytical strategy where the independent variables are added to the regression models based on the questions. In the first model only parental class is added, which allows us to see the bivariate relationship between parental social class and our dependent variables. In the second model baseline values for the dependent variables are added. This allows us to see the extent to which the differences in the dependent variables between social classes represent a stable social class effect where differences at interview 2 are related to differences that were already existent at interview 1. In the third model educational attainment at interview 2 is added. The introduction of this variable allow us to firstly see the effect of education on our dependent variables controlling for baseline values, but it also allows us to see the extent to which remaining differences between different social class backgrounds are related to differences in educational attainment. The fourth model adds gender, geographic area, parental country of birth, cohabitation and children. This allows us to control for compositional effects related to these variables.

In addition to these four models each table also includes three models where the full regression model is run separately for three categories of parental class. These are blue collar workers, higher white collar workers and others. This is done in order to investigate if education is of the same relative importance for youth from different social class background. The choice of categories was here led by a wish to particularly look at the group that might be the most vulnerable due to the relatively low parental education, blue collar workers, as well as the group that come from a high education background, higher white collar workers. For this analysis it should be kept in mind that the higher white collar group has a relatively small n (n=139), and results from the separate analysis for this group should be interpreted as more indicative.

4. Results

This chapter investigates how parental class and education impact non-market capabilities. As discussed above one key issue here is that parental class and educational education are interrelated and that a possible mechanism for any effect of parental class is through its effect on educational attainment. To look at the extent to how parental social class is related with educational attainment in this dataset we in table 1 have run a number of logistic regression models on the probability of having 2-year upper secondary school, 3-year secondary school and university education by the time of the second interview. For each educational category two models are presented, the first showing the bivariate relationship between parental social class with the level of education and the second adding available control variables.

Table 1 here conform very well with previous research on class background and education. It shows clearly that the parental class variable has a very strong effect on the educational attainment of the children, and that this relationship only to a very small extent is impacted by compositional effects. Looking at the probability to have 2-year upper secondary education at the time of second interview, which during the period studied was related to vocational education, we see that all categories have a lower probability for having this type of education as compared with those with a blue collar background. There is here a clear class gradient where the differences are not statistically significant for those with lower white collar or self-employed background. Those from a middle white collar background have a significant under risk of 100% for having this type of education at the time of the second interview, while those from a higher white collar background have a significant under risk of over 500%.

Table 1. Probability of different levels of education at T2 (Logistic regression, Odds Ratios)

	2-year upper secondary		3-year upper secondary		University	
	Model 1	**Model 2**	**Model 1**	**Model 2**	**Model 1**	**Model 2**
Parents class 1988-1995						
Lower White Collar	0,75	0,77	0,75	0,82	2,33***	2,00***
Middle White Collar	0,50**	0,52**	0,68	0,75	3,33***	2,83***
Higher White Collar	0,15***	0,15***	0,47**	0,53**	6,61***	5,41***
Self employed	0,71	0,72	0,83	0,88	1,94***	1,78**
(Blue collar ref.)						
Gender						
Female		0,90		0,85		1,25
(Male ref.)						
Geographic area 1988-1995						
City		0,69		0.58**		3,09***
Town with 90k+ inhabitants		0,84		0,68*		2,26***
(Small town or rural ref.)						
Parents country of birth						
Other		0,64		1,05		0,91
(Sweden ref.)						
Constant	0,31	0,41	0,57	0,81	0,34	0,16
Nagelkerke R^2	0,050	0,061	0,016	0,031	0,106	0,154

Levels of significance: ***=0,001-level; **=0,01-level; *=0,05-level

Looking at the probability for having a 3-year theoretical upper secondary education at the time of the second interview we see less differences. All class backgrounds have an under risk as compared with those who come from a blue collar background, but only those with a higher white collar background have a statistically significant under risk (of 100%). The differences are however substantially larger when looking at the probability of having university education at the time of the second interview. The class gradient is here very clear. All groups have statistically significant higher probabilities of having this level of education than those with blue collar background, but this over risk is substantially higher among those with middle white collar background (where it is over 180%) and in particular those with higher white collar background (where the over risk is higher than 400%).

There is thus a very strong connection between parental class and educational attainment. This connection is principally connected with the propensity to have 2-year upper secondary education, which is very strongly connected with having blue collar or lower white collar parents, and university education which is very strongly connected with having higher white collar parents. This pattern would fit class reproduction fairly well as 2-year upper secondary education is very strongly related to blue collar or lower white collar professions while university education is strongly related to semiprofessional or professional occupations. Beside the parental class variable the only variable which has a significant impact on the education variable in our sample is the geographic area, where youths from the cities and larger towns in particular have much higher probabilities to have a university education at the time of the second interview.

Confirming previous research on the relationship between parental social class and educational attainment leads us to the main focus of this chapter, how these factors relate to our non-market capabilities. In table 2 we start by looking at how these factors affect the capability of voice. What we can see in the first model of table 2 is that there is a strong bivariate relationship between parental social class and voice at the time of the second interview. All parental class categories have significantly higher coefficients than youths with a blue collar background. There is also a clear class gradient in the effect where the effect rises from youth with self-employed- or lower white collar to youth with middle white collar background and is highest among youth with higher white collar background. When we in model 2 add the baseline indicator of voice at the time of interview 1 it is clear that a large proportion of this effect is not related to a change in the capability of voice between the two

Table 2. OLS-regression of voice at T2

	Model 1	Model 2	Model 3	Model 4	Blue Collar	Other	Higher W Collar
Parents class 1988-1995							
Lower White Collar	0,20*	0,11	0,03	0,00			
Middle White Collar	0,36***	0,29**	0,17*	0,12			
Higher White Collar	0,52***	0,32**	0,15	0,07			
Self employed	0,21*	0,15	0,09	0,07			
(Blue collar ref.)							
Voice 88-95		0,32***	0,31***	0,31***	0,25***	0,34***	0,26***
Level of education 1996-2003							
2 year upper secondary			0,04	0,05	-0,03	0,18	-0,49
3 year upper secondary			0,20*	0,18	0,09	0,27	0,18
University			0,55***	0,51***	0,48**	0,61***	0,32
(Compulsory or less ref.)							
Gender							
Female				-0,17**	-0,43***	-0,06	-0,25
(Male ref.)							
Geographic area 1988-1995							
City				0,20**	0,37*	0,18	-0,12
Town with 90k+ inhabitants				0,12	0,04	0,17	-0,11
(Small town or rural ref.)							
Parents country of birth							

Other				0,00	-0,07	0,00	0,14
(Sweden ref.)							
Cohabiting							
Cohabiting				-0,10	-0,04	-0,12	-0,05
(Single ref.)							
Children							
Yes				-0,12	-0,00	-0,13	-0,50
(No ref.)							
Intrercept	2,88	1,88	1,81	1,92	2,21	1,73	2,58
Adj. R^2	0,025	0,184	0,224	0,242	0,178	0,260	0,143

Levels of significance: ***=0,001-level; **=0,01-level; *=0,05-level

In model 3 and 4 we introduce the educational attainment of the youth as well as the control variables. Here we can see that the educational attainment between interview 1 and interview 2 do seem to be of importance for the capability of voice. There does however not seem to be a clear gradient in this effect. Instead the effect is limited to a strong statistically significant effect of university level education. Introducing educational attainment also does remove almost the entire effect of parental class. This would seem to indicate that a substantial part of the effect of parental class on the capability of voice is transmitted through differential educational attainment, i.e. the higher propensity of in particular youths with higher white collar background to go to university. Beside the effect of university education there is in model 4 two further factors that do affect the development of the capability of voice between interview 1 and interview 2. There is a gender effect, where women have a significantly lower coefficient than men, and there is geographic effect where youths from cities have a significantly higher coefficient than youths from small towns and rural areas.

Finally in table 2 we perform separate analyses for three different parental class categories; blue collar, higher white collar and other, on our indicator of the capability of voice. What we can see when we look at these analyses is that the parental class background can matter for the effect of education. The very positive effect of university education found in the combined analysis is present among those with a blue collar background as well as those with other social class backgrounds, but less so among those with higher white collar parents. The effects of gender and geographic area are further only apparent among those with a blue collar background. It is thus among those who come from the class background

that is most vulnerable in relation to the capability of voice that young women and small town/rural youth are the most vulnerable.

Looking at the capability of agency in table 3 we see a pattern that is largely similar as to that found for voice in table 2. Looking first at the bivariate relationship between parental class and agency in model 1 we see very strong effects of class background. All categories but those with self-employed parents have significantly higher probability than youth with blue collar background to have the capability of agency at the time of the second interview. The effects also follow a clear class gradient where those with lower white collar background have an over risk of around 60%, those with middle white collar backgrounds have an over risk of around 140% and those with higher white collar backgrounds have an over risk of around 200%. When we in model 2 introduce the baseline variable, presence of agency at the time of the first interview, we can see that it has a very strong effect on the probability of agency at the time of the second interview. The introduction of the baseline variable does here however not seem to affect the impact of the parental class variable. This is quite different from what we found in the case of voice and could be related to our indicator of agency. Our indicator of agency, the ability to appeal government decisions, is something that is much more connected with adult life than the ability to express political opinions. There is thus a substantially greater development of this capability between the two interviews as compared with the indicator of voice. This makes the baseline indicator somewhat less relevant for who has the capability at the time of the second interview, although it is of great value as a predictor for those who had the capability at the time of the first interview.

Table 3. Probability of agency T2 (Logistic regression, Odds Ratios)

	Model 1	Model 2	Model 3	Model 4	Blue Collar	Other	Higher W Collar
Parents class 1988-1995							
Lower White Collar	1,64**	1,60*	1,32	1,28			
Middle White Collar	2,71***	2,40***	1,89**	1.74*			
Higher White Collar	2,98***	3,01***	1,96*	1,83*			
Self employed	1,31	1,24	1,06	1,06			
(Blue collar ref.)							
Agency 88-95		3,52***	3,21***	3,15***	2,91***	2,87***	14,22***
Level of education 1996-2003							
2 year upper secondary			1,14	1,07	1,69	0,81	0,38
3 year upper secondary			1,60	1,49	2,02	1,13	1,69
University			3,56***	3,30***	5,42***	2,95***	0,89
(Compulsory or less ref.)							
Gender							
Female				0,64**	0,56*	0,68	0,60
(Male ref.)							
Geographic area 1988-1995							
City				1,30	1,49	1,26	1,70
Town with 90k+ inhabitants				1,57*	1,77	1,41	2,18
(Small town or rural ref.)							
Parents country of							

birth							
Other				0,99	1,60	0,81	0,32
(Sweden ref.)							
Cohabiting							
Cohabiting				1,33	0,96	1,48	2,17
(Single ref.)							
Children							
Yes				0,81	1,35	0,59	1,10
(No ref.)							
Constant	1,58	1,06	0,68	0,66	0,46	1,12	1,71
Nagelkerke R^2	0,045	0,134	0.187	0,207	0,204	0,185	0,281

Levels of significance: ***=0,001-level; **=0,01-level; *=0,05-level

Introducing educational attainment and controls in model 3 and model 4 we can see that the effect of parental class found in previous models is substantially reduced. There is no longer a statistically significant effect of lower white collar background and the effect of middle white collar and higher white collar parents is roughly halved when educational attainment is introduced. The strong effect of parental class is thus to a large extent connected with the differential educational attainment between youths with different class backgrounds. As for the educational attainment variable we see that, as was the case with the capability of voice, the effect is connected with university education. Only those youths with a university education have a significantly higher probability to have the capability of agency at the time of the second interview. This effect is however rather strong and those who attain a university education have an over risk of well over 200% to hold this capability as compared to those with the lowest education. Of the control variables introduced in table 4 only gender has a significant effect and women have a lower probability of agency as compared with men.

The separate analysis of the three different parental class categories in table 3 indicate that education appears to have a similar differential effect for the capability of agency as was found for the capability of voice. We here find that the very positive effect of university education for the capability of education found in the whole sample appear to be very much stronger for those youths who have a blue collar background. In this group university education was connected with an over 400% over risk of holding the capability of agency as compared with the reference category. For those with other class background the over risk

was almost 200% while no educational differences could be noted for those with higher white collar background.

Turning finally to the capability of health in table 4 we can see that the parental social class background does not seem to be of importance. There is here no significant effect of any class background category on the probability to have a self-rated health that is other than good in the bivariate model 1, a situation that is not affected by the introduction of baseline health, educational attainment and control variables in subsequent models. We can in model 2 see that the baseline value is strongly related to the probability of having less than good self-rated health at the time of the second interview. Educational attainment is in model 3 shown, as was the case with the capabilities of voice and agency, to be of importance for the probability to have less than good self-assessed health. Youth who attain theoretical 3-year upper secondary education have here an under risk of around 110%, while those who attain university education have an under risk of around 190%, as compared with those who remain at the level of compulsory education. Of the control variables introduced in model 4 only the parental country of birth has a significant impact on the capability of health, where youths with a parental background other than Sweden have a substantial over risk of other than optimal self-rated health.

That we found no effect of parental class on the capability of health does however not have to mean that it is of no importance. Looking in table 4 at the separate analysis made for the three different parental class categories we see an interesting pattern that is similar to the two other capabilities that we previously looked at. The effect of education on the capability of health appears to be strongest among youth with blue collar backgrounds. In this group 3-year theoretical upper secondary education as well as university education have similar strongly significant effects on the probability of having less than good self-rated health, with an under risk of around 375% as compared to those with only compulsory education. Within the compiled parental class background category “other”, only university education had a significant effect. Those with a university education here had an under risk of around 170% as compared with those with only compulsory education. Among those with higher white collar parents there were however no differences in the probability to have less than good self-rated health between groups with different educational attainment.

Table 4. Probability of reporting self-rated health as not good T2 (Logistic regression, Odds Ratios)

	Model 1	Model 2	Model 3	Model 4	Blue Collar	Other	Higher W Collar
Parents class 1988-1995							
Lower White Collar	1,10	1,17	1,33	1,34			
Middle White Collar	0,85	0,87	1,04	1,05			
Higher White Collar	1,19	1,34	1,73	1,81			
Self employed	0,88	0,91	0,99	1,00			
(Blue collar ref.)							
Health 88-95		3,40***	2,97***	2,91***	3,16*	3,44***	2,16
Level of education 1996-2003							
2 year upper secondary			0,66	0,70	0,60	0,75	1,04
3 year upper secondary			0,44**	0,47*	0,22**	0,61	0,77
University			0,34***	0,34***	0,20**	0,37*	0,65
(Compulsory or less ref.)							
Gender							
Female				1,24	1,22	1,38	0,71
(Male ref.)							
Geographic area 1988-1995							
City				1,43	1,49	1,03	---
Town with 90k+ inhabitants				1,50	1,01	1,37	---
(Small town or rural ref.)							
Parents country of birth							

Other				2,18**	1,54	3,57***	1,15
(Sweden ref.)							
Cohabiting							
Cohabiting				1,00	2,43	0,77	0,80
(Single ref.)							
Children							
Yes				1,17	1,49	0,71	3,42
(No ref.)							
Constant	0,12	0,10	0,18	0,10	0,09	0,12	0,21
Nagelqurke R^2	0,003	0,041	0,066	0,091	0,167	0,116	0,045

Levels of significance: ***=0,001-level; **=0,01-level; *=0,05-level

5. Conclusions

Drawing on the capability approach this chapter has provided an initial longitudinal investigation of the relationship between parental social class, educational attainment and the capabilities of agency, voice and subjective health. We started out by exploring the extent to which parental social class is related with educational attainment in the data set used. Our analysis confirmed previous research on the relationship between class background and education with a strong class gradient in educational attainment in our data. Following our first initial research question; are there differences in the capabilities of agency and voice between young adults from different social class backgrounds? Our empirical analyses demonstrated that social class of origin does matter for the capabilities of agency and voice but not for subjective health. For the capability of voice a clear class gradient was displayed; all other class categories had significantly higher coefficients than youths with blue collar background. Also looking at the relationship between the capability of agency and social class of origin we found very strong effects of class background. When we introduced the baseline variables of voice and agency this relationship was the impact of class background essentially remained.

Turning to our second research question; does educational attainment affect the capabilities of agency, voice and subjective health? We found that educational attainment between interview 1 and 2 seemed to be of importance for all three capabilities. However, a clear gradient was not found, instead the outcomes were mostly restricted to a strong effect

of university level education. Furthermore, the introduction of educational attainment, in both analyses, substantially decreased the effect of social class of origin on both agency and voice. This leads us to our third research question; can differences in these capabilities between young adults from different social class backgrounds be understood from differences in educational attainment? As was shown in table 1 social class of origin is strongly related to educational attainment and the analyses do suggest that a large part of the effect of parental class on agency and voice can be understood from the class gradient in educational attainment.

Our fourth research question read; is education of the same relative importance for the capabilities of agency, voice and subjective health for youth from different social class backgrounds? Our separate analyses of class backgrounds gave some indications of university level of education, and in the case of subjective health also 3 year upper secondary education, mattering more for youths with a blue collar background and less for those with a higher white collar background for all three non-market capabilities studied. This result would suggest that higher education might be of greater importance for the capabilities of youths from more vulnerable backgrounds than for other youths.

Our empirical results show that it is primarily university education mattering for the capabilities investigated. This indicates that worries about over education and education as a positional good need to take into account other, wider educational outcomes than market outcomes to properly evaluate it effects. Not possibly not least when it comes to groups of youths who come from relatively disadvantaged backgrounds such as youths with blue collar background. In the present paper an attempt has been made to widen the perspective of how educational outcomes can be investigated. We have here attempted to shed some light as to how social class of origin and educational attainment relates to capabilities central for social participation and the ability to act as full citizens in a democratic society. However, the results reported are by no means final. The indicators used should be complemented by other variables connected to agency and voice. Furthermore, the empirical analyses conducted must be tested using other methods. Taking prior conditions into account and applying a longitudinal approach using a baseline indicator have ensured that effects of higher education are not over- nor underestimated and have to some extent reduced selection effects; however, we have not been able to capture individual change. This should be an important step in future research. Despite the shortcomings of this study, we hope to

have demonstrated the importance of putting emphasis on wider benefits of education for social equality and the expansion of life chances and the significance of applying a longitudinal approach.

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F. Labour Market Outcomes of Early School Leavers using a capability-based approach. A comparison of France, Italy, Poland and Sweden

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1. Introduction

As a matter of priority, tackling early school leaving is a headline challenge in the Europe 2020 strategy. The rationale that underpins this target is the increasing demand for higher employment rates. As mentioned in a recent communication from the commission,

> "By impacting directly on the employability of young people, it [reducing early school leaving] contributes to increasing integration into the labour market and so to the achievement of the headline target of 75% employment rate for women and men aged 20 to 64." (European Commission, 2011, p.2).

By drawing on the knowledge economy, the emphasis on raising education is thus in line with the desire to raise employment rates, which lies at the core of the European strategy (Salais, 2006).

Through the OMC, the indicators are increasingly being used to monitor and evaluate labour market performance. However, indicators are often pictured as neutral or scientific tools of measurement insofar they are "evidence based". Although indicators can provide valuable information, they also have limitations: they are inextricably rooted in a number of implicit normative choices and selections, embedded with values (Salais 2006, Bonvin et al. 2011, Vero et al. 2012). In consequence, what is measured is what is cared about. In other terms, indicators are used to monitor what we care about, need to control, or make decision about. Clearly, not all indicators are similar. What is common is their prevailing role to make complex situations and development understandable or visible.

One of the structuring choices regards information that ought to be considered as relevant by those in charge of policy implementation. Indeed, the decision to focus on certain data and to exclude others significantly impacts on the very content of public policies and on the way to define their efficient implementation. The choice of an informational Base of Judgement injustice (IBJJ)

> "implies a specific factual data or information which is then considered as the adequate yardstick for public evaluation and action. This data selection coincides with the exclusion, explicit or not, of other information seen as irrelevant" (Bonvin and Farvaque, 2005).

This also applies to the field of young labour market outcomes. This in turn translates in a specific definition of what kind of social intervention should be set up in order to promote their school-to work transition, as well as in a specific conception of how responsibilities should be distributed. In our view, Sen's Capability Approach (CA) is a useful framework to analyse how the normative postulates underlying labour market outcomes tend to orient toward normative expectations of individuals.

The issue of IBJJ is one of main tenets of the CA. As put forward by R. Salais,

> "the great swing represented by the capabilities approach has to do with the choice of the reference in relation to which public action (policies, legislation, procedures), should be designed, implemented and evaluated." (R.Salais, 2005)

According to the CA, public action has to enhance available opportunities for the persons while not seeking to impose to them specific manners of being, doing or living. The CA places special emphasis on both aspect of the real freedom: on the one hand, the development of opportunities (or empowerment) whereby persons grant access to the means of freedom, and on the other hand, the process aspect of freedom (or freedom of choice) whereby persons have the ability to be agent, to influence their choices (Bonvin, 2005).

The paper consists of four parts: at the outset of the paper, we discuss and briefly sketch the early school leaving issue in Europe, emphasising the various definitions at stake and comparing the situation of the various member states. We will shed light on the extent of early school leavers in a European comparative context which are targeted at specific group of activation policies. In section 2, the capability approach will be used to challenge the employment rate indicator on which the European Policy debate has been focusing and explain the shift of emphasis involved by the idea of capability for work. Section 4 related to specific outcomes of this targeted group on the labour market and tackles some issues that are traditionally left aside by the employment rate. We propose to go a step beyond the employment rate together with a further step towards a capability-based approach of labour

market outcomes. In this perspective, the focus will be on four countries with opposing views of the labour market and social security: France with its continental welfare regime, Italy with its Mediterranean model, Sweden, with its Universalist social-democrat approach and Poland as a new member state. The data stem from EU-Statistics on Income and Living conditions (EU-SILC). The last section opens future research avenues in a dynamic perspective and advocates multilevel analysis to tackle labour market outcomes of early school leavers for analysing individual, household factor and institutional conversion factors allowing them to convert resources into capability for work.

2. Early school leavers in Europe

Strategies of employability and activation are more specifically targeted at groups which are excluded from the labour market participation (Lindsay 2007). Among them are young people from disadvantaged backgrounds who are not in work and education and who are regarded at risk of becoming long-term unemployed (Crespo and Serrano Pascual 2004; Weil and al. 2005). This section examines this issue and briefly sketches the way early school leavers are defined, emphasising the various definitions at stake and compare the situation of each member states.

2.1. School leaving problematic

An important focus in education research is the occurrence of early school leavers. The problematic early school leaving is inescapable on the European level as it is today recognized as a main challenge for the educative system. Reducing ESL is a headline target for achieving a number of key objectives in the Europe 2020 Strategy and one of the five benchmarks of the strategic framework for European Cooperation in Education and Training (ET 2020). By 2020, the member states are expected to reduce to a 10% rate the early school leaving. The choice of this objective aims at ensuring the equity of educative systems, developing the employability of individuals and ensuring social cohesion.

The European Union is no novice in this regard. Since the 2003 Lisbon Strategy, EU Member States have been expected, to reduce the share of early school leavers to less then 10% of all 18- to 24-year-olds. This target has not been reached but reconducted in continuation of the Lisbon strategy. Therefore, in the strategic framework for cooperation in education and training (ET2020) adopted in 2009[4], EU Member States have maintained the 2003 benchmark that the average rate of early school leavers should be no more than 10%. In June 2010 the European heads of state and government adopted the Europe 2020 strategy for smart, sustainable and inclusive growth. Giving a strong message to Member States they decided that reducing the share of early school leavers to less than 10% Europe-wide by 2020 is one of the headline targets underpinning this strategy.

This agenda is pursued through the open method of coordination (OMC), whereby each individual country is responsible for determining how to implement the adequate policies. The OMC replaces the classic Community method, based on top-down directives, and is altogether different. Here, the EU does not lay down any laws or binding texts, but issues guidelines accompanied by timetables for attaining general targets. Member States convert the guidelines into national policies and then draw up action plans indicating how they envisage implementing these principles. The Commission scrutinizes these documents, drafts a joint report with the Council of Ministers assessing countries' actions according to a set of indicators. The directives can then be revised for the next time round in the light of this exercise.

2.2. . Early school leavers: what are we talking about?

The work of defining, measuring, and reporting on early school leavers (ESL) permeates the research. On this topic, many different definitions of early school leaving exist (Fossey, 1996). In very general terms, theorists define ESL as a failure to complete the education that the norms defined as being good for pupils and for society (Viadero, 2001; Finn, 1989) or a failure to complete the education started or school leaving certificates (Montmarquette, Mahseredjian and Houle 2001; Morrow, 1996). ESL can also be defined as a failure to

[4] http://ec.europa.eu/education/lifelong-learning-policy/doc28_en.htm

complete upper secondary school, a failure to complete compulsory schooling or a failure to gain qualifications or school leaving certificates.

Policy makers also use varying methods of counting and reporting those pupils who do not complete their high school education For example, on the one hand, the OECD defines early school leavers as 20-24 year olds with education below upper secondary level. On the other hand, the European Union is playing a major role in defining the terms of the debate surrounding the early school leavers. The European Union defines early school leaver's as people aged 18-24 who have only lower secondary education or less and are not longer in education or training. This definition was agreed by EU Education Ministers in the Council in 2003 (Council conclusions on "reference levels of European Average Performance in Education and Training (Benchmarks)", May 2003). Early school leavers are therefore those who have only achieved preprimary, primary, lower secondary education or a short upper secondary education of less than 2 years (levels 0,1,2 or 3c short in the united nations International Standard Classification of Education – ISCED – Cf. Inset 2)

At EU level ESL rates are defined by the proportion of the population aged 18-24 with only lower secondary education or less and no longer in education or training[5]. Early school leavers are therefore those who have only achieved pre-primary, primary, lower secondary or a short upper secondary education of less than 2 years (ISCED 0, 1, 2 or 3c short5), and include those who have only a pre-vocational or vocational education which did not lead to an upper secondary certification. In this perspective, the data on early school leavers are collected annually via the Labour Force Survey. However, the data in this section stem from the EU-Statistics on Income and Leaving Conditions (EU-SILC) from 2007 where no distinction between lower and upper secondary school can be made. The definition used is slightly different than that used in the European policy context and provides a general underestimation of the early school leaving. Here early school leavers comprise those aged 18 to 24 no longer in education who have only achieved preprimary, primary, lower

[5] Council conclusions on "Reference levels of European Average Performance in Education and Training (Benchmarks)", May 2003. The OECD defines early school leavers as 20-24 year olds with education below upper secondary level

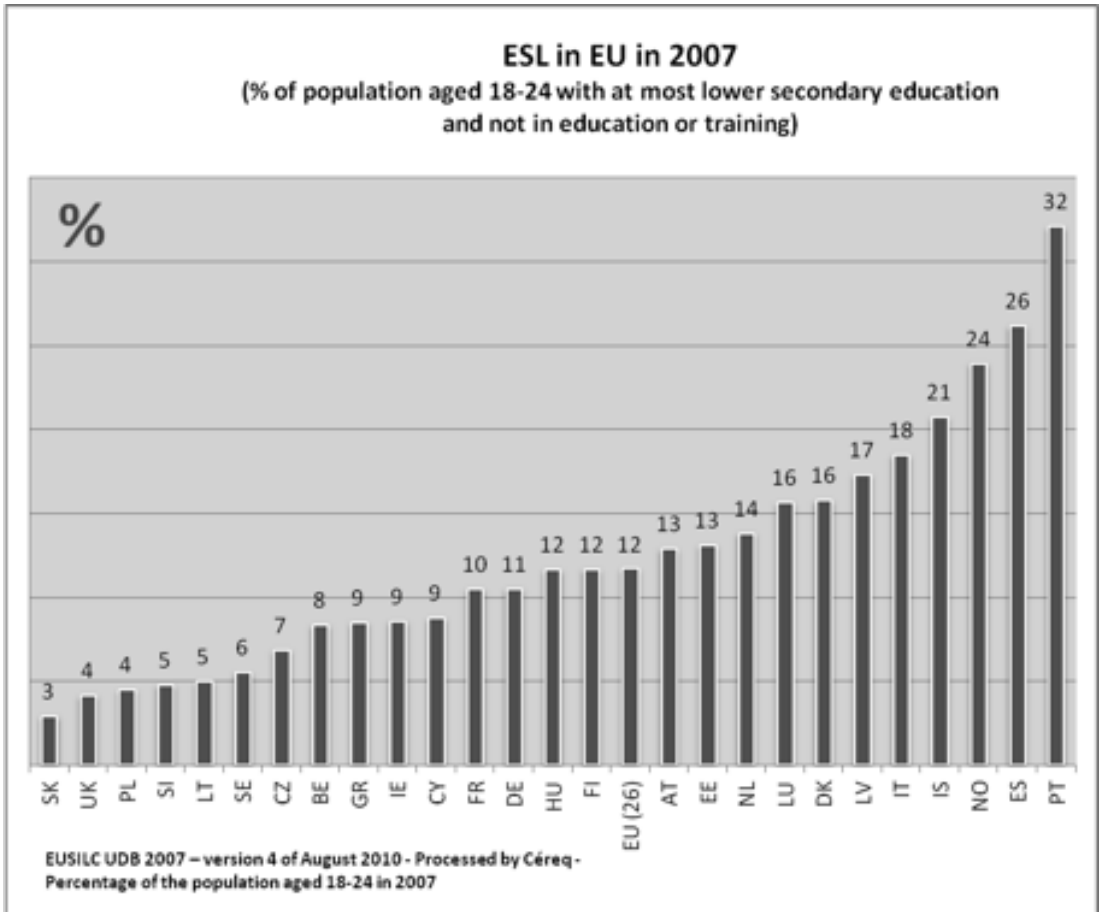
secondary education (levels 0,1,2 in the united nations ISCED). This is the working definition adopted for this document.

2.3. Nature and extent of early school leaver's in Europe

2.3.1. Early school leavers in a comparative context

The data in this section stem from EU-Statistics on Income and Living Conditions (EU-SILC) from 2007. In 2007, using the definition mentioned above in the EU-26, about 12% of people aged 18-24 are classified as early school leavers. However significant differences arise among the member states. Figure 1 shows the figures for European Countries.

Figure 1. Percentage of the population aged 18-24 year olds with at most lower secondary education and not in education and training.



Various member states are found to have already achieved the European target: (République Tchèque, 3%; United Kingdom, 4%; Poland 4%; Slovenia, 5%; Lithuania, 5%; Sweden, 6% etc.). France is found to have lower rates of early school leaving than the average for EU-26, occupying an intermediate position alongside the dual system models of

Germany (11%), Austria (13%) or the Netherlands (14%). Rates of early school leavers are significantly higher in the Nordic countries (Denmark, 16%; Norway, 24%). However rates of early school leaver's are much higher in Southern European countries than in the rest of Europe (Italy, 18%; Spain, 26%; Portugal, 32%).

Cross-national variation in rates of early leaving reflects, at least in part, the structure of the educational system, but also the way the each level of school pathways is classified in each country in the ISCED classification. Indeed, in the early school leaving discussion we have all the normal comparative problems to different educational systems, different definitions and different statistical procedures to suggest a number of common problems that comparative early school leaving has to deal with.

Smyth has argued that cross-national variation in rates of early leaving reflects, at least in part, the structure of the educational system.

> "Two sets of models appear to be associated with lower rates of early leaving: the Nordic model and the dual system model. The Nordic model (found in Sweden and Finland) is based on a comprehensive system with students taking the same pathway, at least until the end of compulsory schooling. This approach, coupled with a strong policy commitment to equity, results in smaller differences between social groups and schools in educational outcomes (see also Willms, 2006, on PISA achievement scores). The dual system model (evident in Germany, Austria and Denmark) on the other hand, involves a rigid differentiation into academic and vocational tracks, the latter usually combining in-school education with on-the-job training. This model appears to provide a pathway for students who might otherwise drop out of school, albeit at the expense of more restricted career pathways in the longer run (Gangl, 2003). High rates of early school leaving in Southern Europe may be attributed to historical trends in educational attainment and the lack of clear trajectories and returns from education." (Smyth, 2007)

2.3.2. Early school leavers rates have to be interpreted with care

Eurostat emphasizes moreover that the leaver rates have to be interpreted with care and focuses on the need for improving the quality of data. Because of an heterogeneous application of certain concepts, the comparability remains rather restricted. As mentioned

by Eurostat, it remains problematic and its quality raised some doubts : in term of reliability, it receives indeed only the poor mark C (Melnik and al. 2010).6

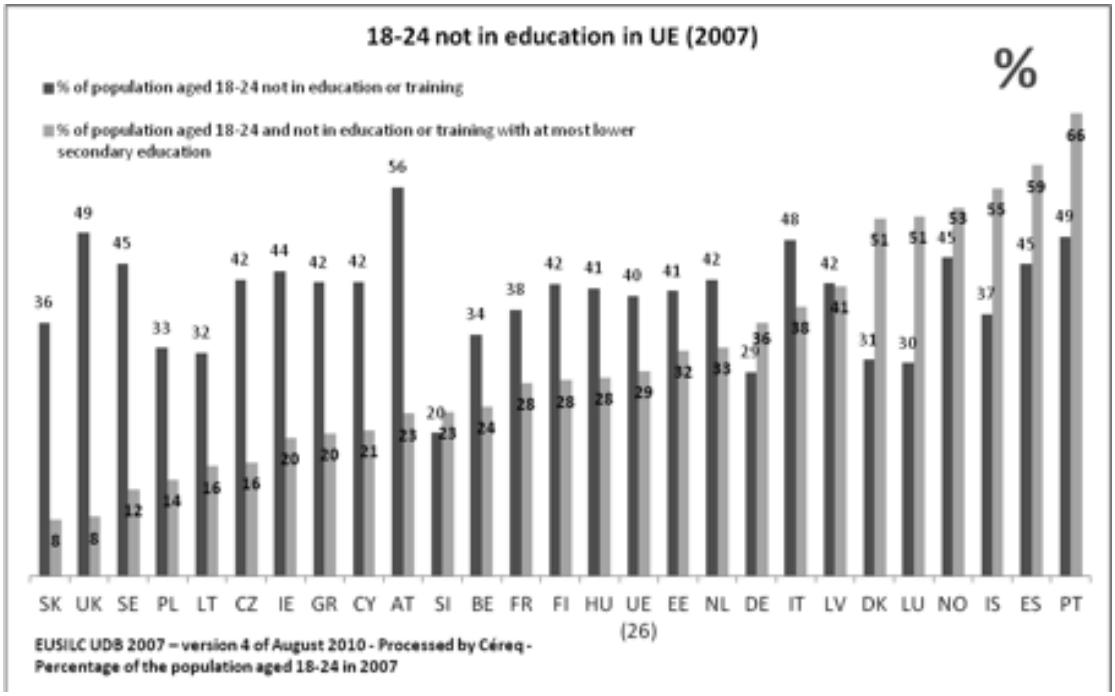
Comparability across countries is achieved in the European Labour Force Survey (LFS) through various regulations ensuring harmonisation of concepts, definitions and methodologies for all EU Member States, EFTA and candidate countries. However the results might lack comparability across countries due to the heterogeneity of the implementation of the concepts of participation in education and training in the Labour Force Survey.

The chapter devoted exclusively to this European indicator details for each country the risks of measurement. A significant fact can for example be advanced to explain why the United Kingdom shows one of the lowest early school leavers rate. “The United Kingdom classifies the first vocational trainings which last less than two years on level 3 of the ISCED whereas they should be logically on level 2 […] On this point, the international agencies correct or not these British statistics” (CERC, 2008, p. 18)”.

This problem of the UK, even if we are aware of it, may disturb a comparative discussion. In the following sections, the performance of European countries will then be studied through the lens of this specific distinction on early school leavers and non early school leavers, by focusing on four major concurrent options: the continental mindset of the United Kingdom, the universalist mindset adopted in Sweden, the Mediterranean mindset adopted in Italy and the Poland mindset as a new member state**.** Under the four countries under examination (France, Poland, Sweden and Italy), the high rate of early school in Italy in evident.

[6] An indicator is graded “C”, if one or both of the following conditions is fulfilled: 1. Data might have to be interpreted with care as methodology/accuracy does not meet high quality standards. 2. There are some serious shortcomings with regard to comparability across countries (including the lack of data) AND breaks in series for several countries which seriously hamper comparison over time (including the lack of data)

Figure 2 : Levels of education of 18-24 years old and of school

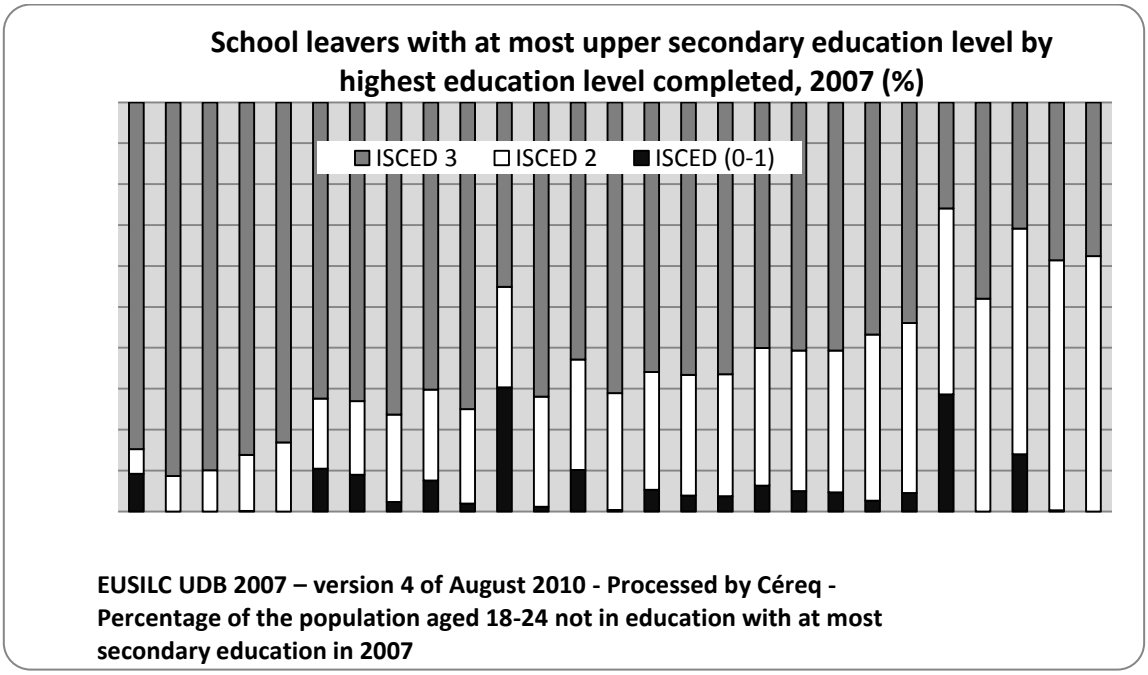


Note:

Among the 18-24 year-olds Portuguese, 49% are not any more in studies

Among the young Portuguese of 18-24 year-olds who left school, 66% leavesat most lower secondary level

Figure 3. School leavers with at most upper secondary education level by highest education level completed



The profile of early school leavers varies considerably within the EU according to the highest education level achieved. In order to indicate the variety of young who stop their studies prematurely, one may divide the school leavers into three sub-groups, while being based on the level of education carried out.

The first group is composed of those which stopped pre-primary or primary school education. This group is often categorized of “dropouts” and it is about the most problematic group because they did not obtain any type of qualification and they will be confronted with serious problems while entering the job market.

The second one is composed of those who leave school at best at a lower secondary education level. Compared with the first group, they will probably have more chances on the labour market but a level of lower secondary education is however not regarded as a sufficient qualification by many countries to enter and remain in the labour market.

The third one is composed of those who attain the upper secondary education which generally begins at the end of compulsory education; the entrance age is typically 15 or 16 years and entrance qualifications and other minimum entry requirements are usually needed; instruction is often more subject-oriented and typical duration varies from two to five years

Over 5% of early school leavers in the EU-26 complete only primary education. This trend is especially strong in Luxembourg (31%) and Portugal (29%).

Around 35% of early school leavers in the EU complete at most lower secondary education. This trend is especially strong in Portugal (74%%) and Spain (70%).

3. Employment rate against the capability approach

In this section, we’ll argue that the employment rate relate to normative preferences and ideological positions in favour of market efficiency, individual responsibility and other liberal values. Basing ourselves on concepts developed by Amartya Sen – capability and the informational basis of judgement – we shall discuss the limitations of the perspective whereby school-to-work transition is viewed in terms of adaptation to labour market requirements rather than in terms of real freedom for workers.

3.1. Employment rate pitfalls

Indicators cannot be viewed as an objective account of the world; they give an incomplete picture of it by opting for one specific informational basis at the expense of others (Salais 2006, Bonvin et Vielle Bonvin 2001). In this way, they also require to reconfigure the reality observed in the sense of their underlying values and standards. Indeed, even when indicators are based on objective and irrefutable information, they espouse value judgements, often passed over in silence or taken for granted, about the relevance of information worth retaining at the expense of other facts deemed inappropriate. Sen designates this inescapable partiality of the indicators with the notion of 'positional objectivity', which stresses the fact that, depending on our position, we tend to prioritize a point of view on the reality that we observe, to the detriment of other viewpoints (Sen, 1993). Hence there is no such thing as absolute objectivity, neither in scientific knowledge nor in ethical reasoning. A player's notion of what is a fitting description of reality depends on his/her position or situation. Besides, selection of the informational basis not only has descriptive effects (in that it emphasizes one specific way of describing reality); it likewise has the effect of transforming this reality. With the indicators, as a matter of fact, emphasis is also placed on the relationship between description and prescription. Describing situations means making choices and attracting the attention of public decision-makers and public opinion to the issues regarded as most important. Devising indicators is not merely aimed at describing what exists or analysing practices; it is first and foremost a policy move connected with a prescriptive dimension.

As a matter of priority, the ultimate objective of employability and active labour market policies is twofold: first maximising the employment rate at the macro level and second reaccelerating the reintegration into the labour market at the micro level (Bonvin and Orton 2010, Salais, 2010, Bonvin and al. 2011, Vero and al. 2012). The debate is then reduced to the maximisation of the employment rate regardless the nature of the employment7. .By focusing on the employment rate, the experts in the Indicators Group of the Employment Committee (EMCO) cannot of course evade this need to select a specific informational basis

[7] The Committee does however signal in its 2011 work program an intention to devote more attention to the issue of employment quality. That could translate into the adoption of other indicators, be they dynamic or static, whereby the informational basis could be expanded and could thereby usefully complement the information furnished by the job security indicator.

and the condition of positional objectivity, which lies behind every epistemological approach. It is therefore necessary to ask ourselves about the normative and informational foundations of this indicator in the light of Sen's epistemological principles. Our intention, then, is to shed light on the normative postulates underlying this indicator, while putting them to the test of an alternative concept of school-to-work transition brought about by the capability approach.

Applying employment rate as a yardstick to measure school-to-work transition comes out as doubly deficient (Vielle and Bonvin 2008; Vero et al. 2012). On the opportunity side, it aims above all else to develop employability in the sense of increased adaptability to labour market requirements. Thus school-to-work transition appears subordinate to the holding-down of any kind of job at all. It sees employment as the ideal functioning, without taking account of its quality or the person's specific circumstances. Any progress towards work or towards a situation regarded as being closer to work represents progress in school-to-work transition. Such a conclusion seems much less clear-cut if we refer to the capability approach: does a very insecure, poorly paid job really enable the development of the capabilities of an unemployed person and insure a sustainable school-to-work path? It might certainly do so in some cases, but not in all. From a capability standpoint, this question requires a more nuanced answer for which the employment rate indicator allows no scope.

On the process side, to regard the access of employment as a sine qua non precondition for enjoying a certain degree of school-to-work transition is to restrict the free choice of the persons concerned. By establishing a hierarchy of the various possible labour market situations (being employed is better than being unemployed, inactive, etc.), this strategy forces political authorities and beneficiaries alike to comply with this hierarchy and make it a fixed part of their daily practices and customs. Otherwise, the Member States will find themselves with bad marks and the beneficiaries will be threatened with penalties or suspension of their rights. By looking at labour market outcomes from this viewpoint a the employment indicator makes process of school-to-work transition subordinate to the acceptance of labour market flexibility, which in itself significantly restricts freedom of choice. Free choice is acknowledged only inasmuch as the person goes along with the normative concept underpinning the indicator and is willing to adapt to labour market requirements.

3.2. What school-to-work transition should an indicator measure?

The trend towards increasing capabilities coincides with significant modifications of the IBJJ. Moving over to a capability approach-inspired vision of school-to-work would entail a number of developments. First the employment quality issue would need to be integrated into a synchronic and dynamic perspective, referring back to 'an analysis of the scope of working and living possibilities offered by inclusion in employment' (Salais and Villeneuve, 2004: 287). Moreover, by contrast with the normative foundations of employment rate indicator, the capability approach emphasizes the two essential dimensions of real freedom: empowerment (opportunity development), which enables people to acquire the resources of freedom, and respect for process freedom, which enables them to remain in charge of their own choices. Should one of these two dimensions be lacking, the goal of developing capabilities is missed.

Under the capability approach, the main issue at stake is not whether workers are more flexible or adaptable. Rather, it is whether the conditions are properly met for workers to possess real freedom to work and to be entitled to genuine professional development. Such real freedom represents a precondition for taking an active part in the transition from school to work. Aiming at the development of real freedom and capabilities when contemplating flexicurity would lead to the construction of a battery of indicators capable of showing whether people can genuinely benefit from the active support of benevolent institutions, from responsive public services and from deliberately organized policies and institutions: what Sen calls 'conversion factors'. Evaluating security via the lens of capabilities would mean shifting the emphasis to access to different possible options and the existence of a range of choices. These ideas, which are still struggling to take shape in European circles, call for a reinvention of public guidance in favour of the development of real freedom of action for all European citizens.

Despite the richness of the Eu-Silc survey and the use of a representative sample, there are some important limitations to support such a capability perspective. First, a dynamic country study requires a larger sample size than the one provided by the longitudinal data available by the EU-SILC to be considered representative of this group of early school leavers to whom results will be generalized or transferred. Second, a limitation of reliable data will likely require us to limit the scope of our analysis as there are few information on work and

labour market outcomes employment (except monthly information on the nature of the contract and the occurrence of part-time employment) EU-SILC sees employment as the ideal functioning, without taking account of its quality or the person's specific circumstances. Further research through the lens of the capability approach would require both longitudinal and linked data: especially with employer, employment services data in order to tackle both aspects of freedom, i.e. opportunity and freedom. Increasingly, researchers are looking to utilise linked data sets that include links with the data sets of the national statistical office or other statistical agencies (including the population census in some countries) and even linked employer-employee surveys, especially in the capability perspective (Lambert and Vero, 2012). However, unfortunately very few countries have large-scale, linked employer-employee surveys (Meadow, 2010)

4. Consequences of early school leaving to a range of later labour market outcomes: common trends and national features

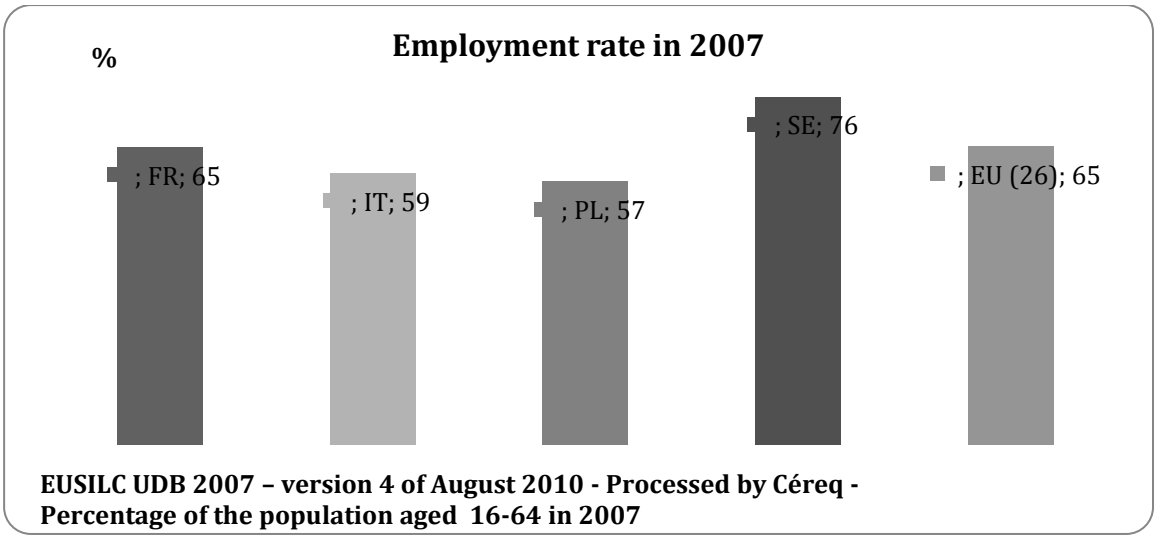
This section put forward a first analysis of labour market outcomes of early school leaver's in the light of the Europe 2020 targets. It mainly focuses on guideline 7 'Increasing labour market participation of women and men, reducing structural unemployment and promoting job quality' (Council of the EU 2010). It looks at developments in employment rates, unemployment rates and forms of non-standard employment, taking into account various subgroups. The data used for performance indicators come from the EU-SILC. These are harmonised data. The national sources have been elaborated either prior to or during the questionnaire design or, later in the procedures of statistical processing, in order to provide figures that match with the accounts categories and frames defined at the European level. But, it is worth emphasizing the harmonisation does not remove at all the differences of heterogeneities resulting from the specificities of national institutions or management modes of national public policies.

4.1. Employment rate of early school leavers in a number of EU countries in 2007

As mentioned above, the objective of active labour market policies is to increase the employment rate. The Lisbon strategy employment targets were a 70% employment rate for

the overall population to be reached by 2010. In 2007, total employment stood at 65% and was 5% below the 2010 target.

Figure 4 – Employment rate of 16-64 year olds



EUSILC UDB 2007 – version 4 of August 2010 - Processed by Céreq -
Percentage of the population aged 16-64 in 2007

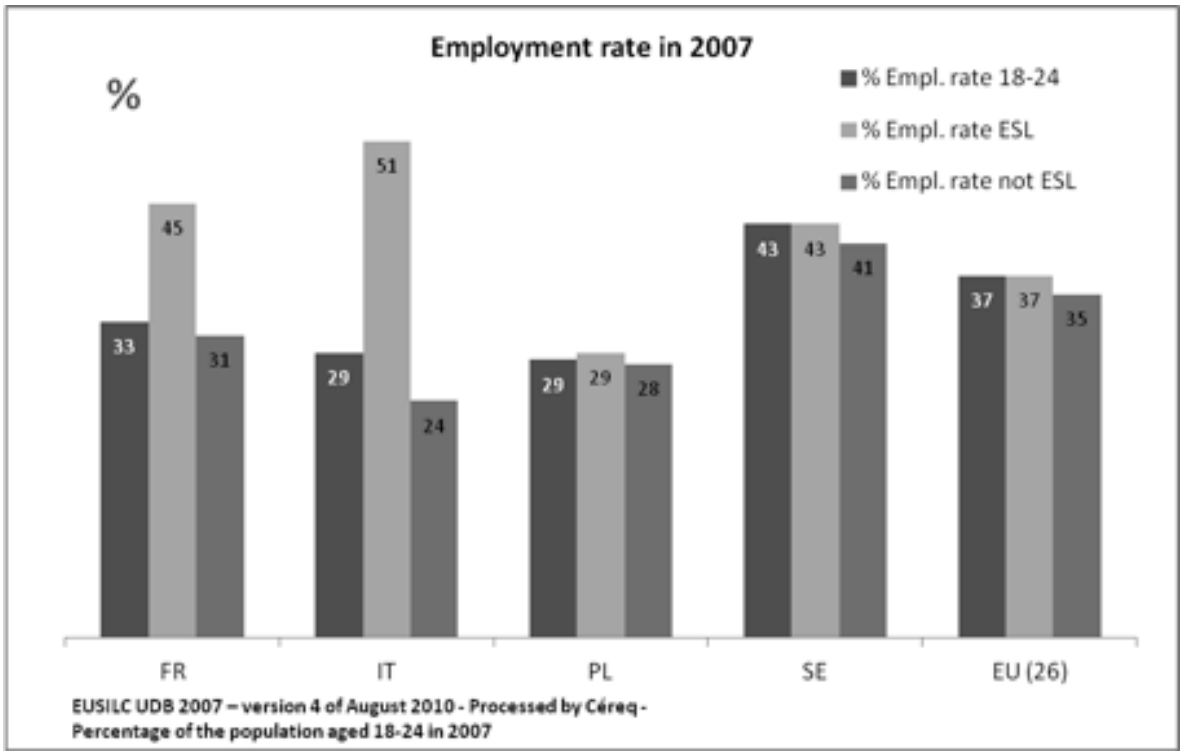
In terms of employment rate, European countries under examination display a high degree of variation regarding employment rate. In 2007, the employment rate in Poland, at 57%, is the lowest of the member states under examination. As a result of important labour market reforms in the 1990s and early 2000s, the employment rate has increased in Italy. But despite this development, it continues to be lower than those in most other European countries. While the French employment rate is at the European average, Sweden does particularly better than the average of EU-26 and the three other countries studies.

Among the youth (18-24 year olds) there are huger differences in the employment rates among the four countries under examination, ranging from fewer than 30% in Poland to more than 50% in France. Different factors influence the youth employment rate among which the structure and design of educational systems (e.g. importance of apprenticeship versus university studies, the average duration of studies), the frequency with which work and studies are combined, as well as the labour market possibilities for youth (school-to-work transition). Contrary to the naive positivism advocated by a number of figure users, the institutional and instrumental framing of these data on the national scale remains significant and false the comparability on the European scale. For instance, the legislation on work contract is different and tends to favour regarding the employment rate score, the countries

with flexible and minimalist rules. In the same way, the inequalities in the development of general and vocational scholarship in its various forms (for example whether apprenticeship is carried out within or outside the firm) challenge the relevance of the 18-24 year-olds category. The employment rate for the 18-24 year-olds is statistically low for the countries which have invested for a long time into the training of the labour force (whose access to the labour market is therefore delayed).

Whereas the Lisbon first objective is to "make Europe a knowledge-based society", and to meet the Lisbon commitments in terms of EES, will these countries have to reduce their education investments? The employment rate targets for 2010 have already been reached for some countries (the UK and the Netherlands) and are out of reach for other Southern countries. These examples, to some respect extreme, are nevertheless symptomatic of the internal contradictions and the drift generated by OMC and its current application (Salais, 2004).

Figure 5- Employment rates of youth (18-24 year olds)



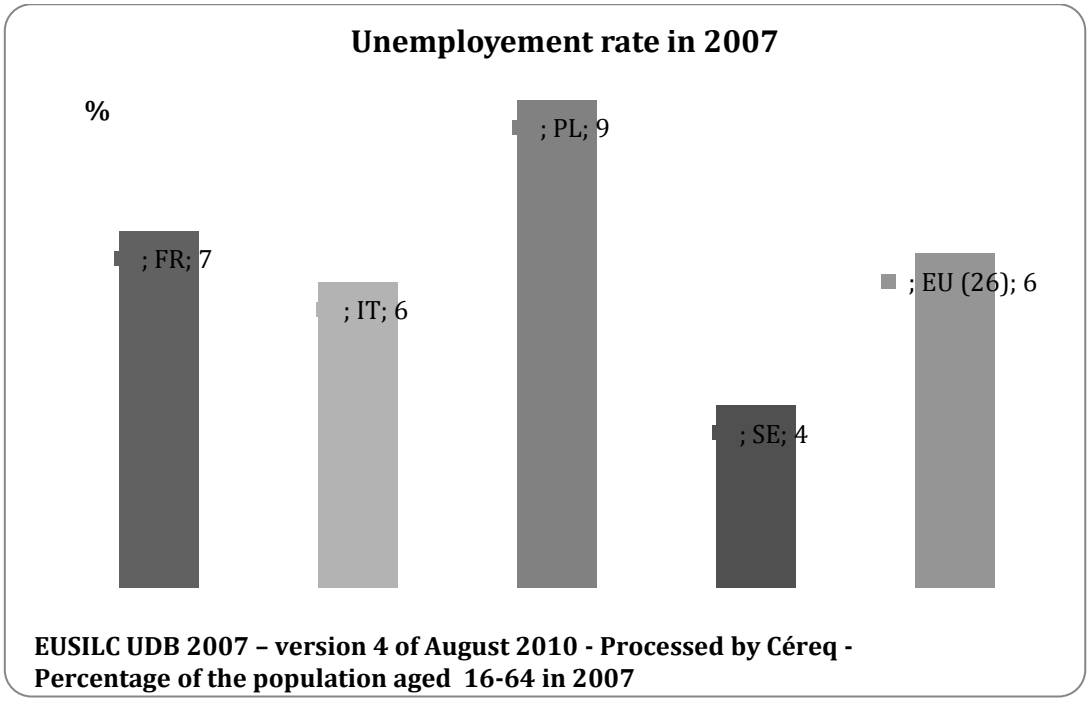
Youth employment rate is running at 37%. Early school leavers are more likely to be employed than non early school leaver's. It does not really mean that employment opportunities are higher. The employment rate per age bracket does not actually account for difficulties specific to young early school leavers in their employment access. Their earlier entry on the labour market leads, by a structural effect, to a higher employment rate than for non early school leavers. Indeed, ESL for who school-to-work transition is nevertheless more difficult are over represented among the 18-24 year olds.

Globally both France and Italy are characterised by a low employment rate among young people less than 25 years old, related to the extension of scholarship. On the other side, Sweden is characterised by a higher employment rate as school-to-work transition occurs earlier, often on the apprenticeship pattern. Young people more easily accede to employment and later more easily to continuing training contrary to countries such as France, where everyone's place in the skill ladder is often determined by the exit level of the education system. There is no actual significant difference in Sweden and the EU-26. Nevertheless, employment activities are partly shaped by national characteristics and policies.

4.2. Unemployment of early school leavers in a number of EU countries in 2007

Apart from the employment, unemployment is another major aspect when outlining labour markets. Figure 7 illustrates differences among countries under examination. In 2007, on the EU-26 average, unemployment rate points to a level of 6%. Looking at the extent of unemployment in 2007, Poland is the worst performer with a rate of 9% while Sweden unemployment rate amounts 4%. When looking at the scope of unemployment, it is essential to consider that the situation of unemployed people fluctuates regarding access to, level of and duration of unemployment benefits as well as in the access to active labour market policy measures (Etui, 2011).

Figure 7. Unemployment rate of 16-64 year olds



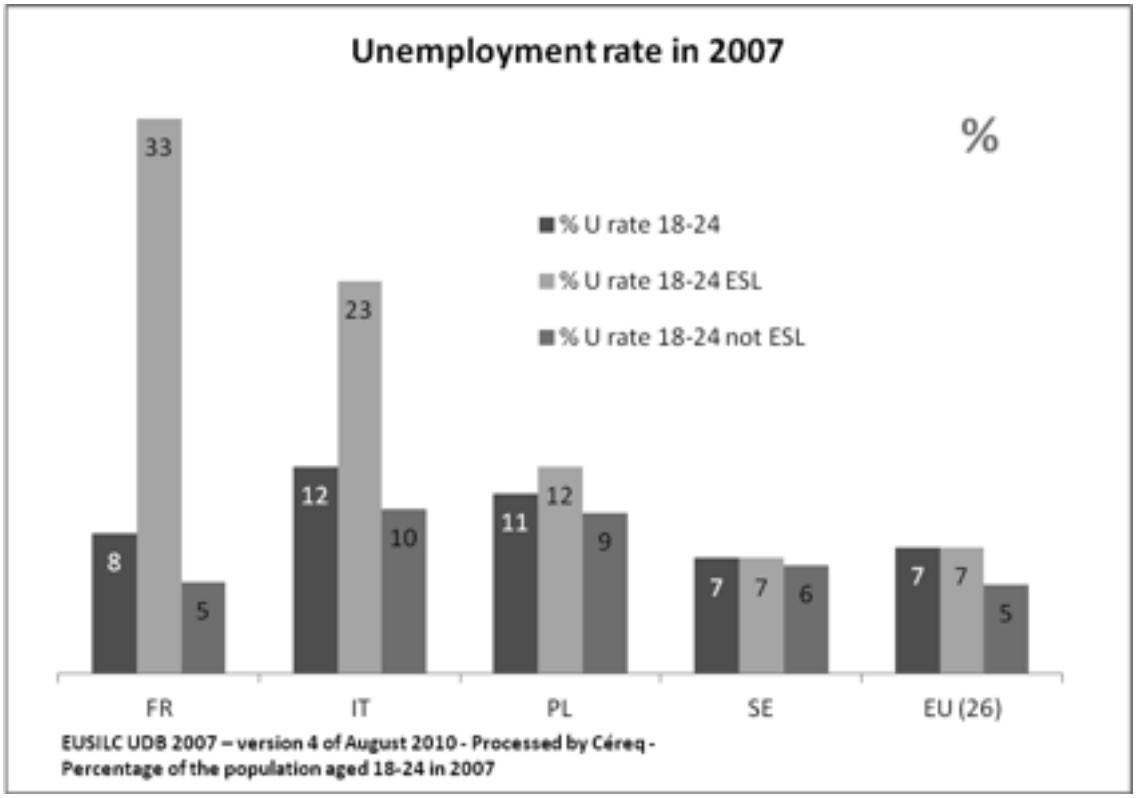
EUSILC UDB 2007 – version 4 of August 2010 - Processed by Céreq -
Percentage of the population aged 16-64 in 2007

In 2007, the average unemployment rate of young people less than 25 years within the European Union is 7%. In France, around 33% of young people less than 25 years old are unemployed. Youth unemployment is a critical issue in France. Also in Italy a large proportion of young people entering the Labour Market is unemployed (23%). Poland takes up a position in the middle, while in Sweden, on the other hand, less than 10% of young people are without employment.

While the low employment rate of young people less than 25 years old both in France and Italy partly reflect the rising school enrolment, it also accounts for worsening labour market opportunities. Indeed youth unemployment rate is higher in France, Italy and even more in Poland than in Sweden, suggesting that it became somewhat more difficult for French youth adults and in a lesser extent to Italian young adults to find work.

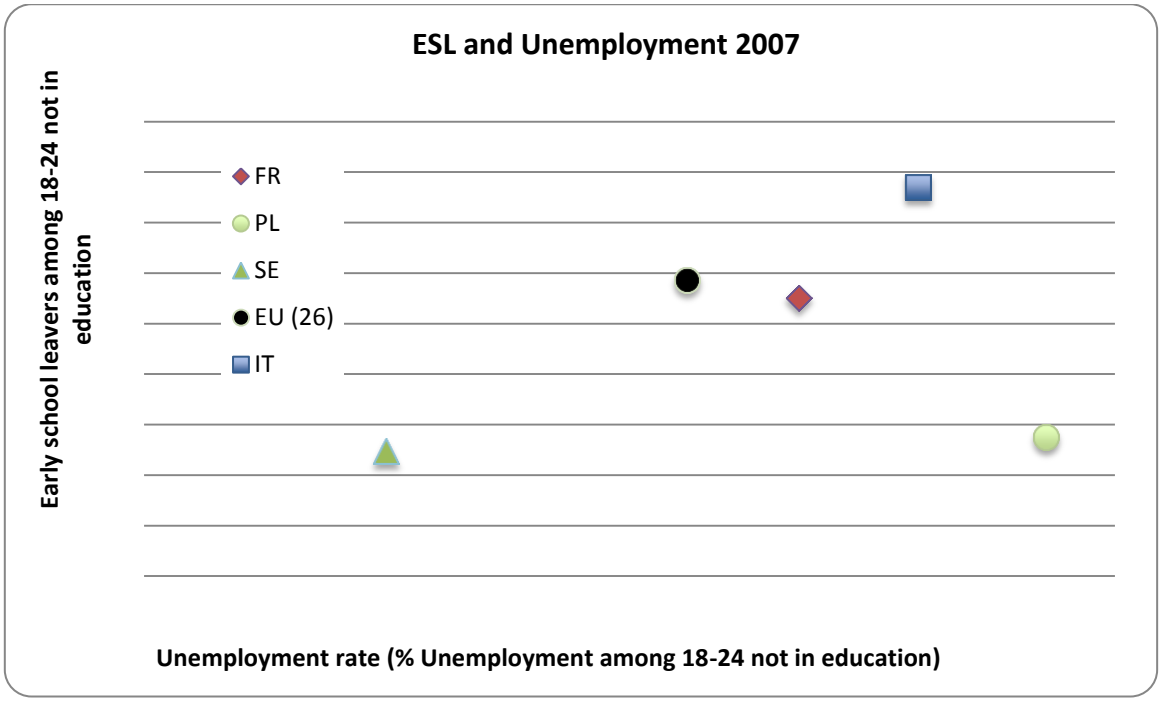
Educational attainment help protect young people for unemployment. Indeed, in terms of labour market outcomes, early school leavers are much more likely to experience unemployment than their higher educated counterparts in the post-school period, especially in France and in Italy. In Sweden is the unemployment rate among the lowest educated people is about 7%, i.e. the European average of all the 18-24 years old.

Figure 6. Unemployment rate of 18-24 year olds



As mentioned in Figure 8, unemployment rates among young people who are not in education increases with the share of early school leavers. The member states with comparatively large shares of early school leavers perform have also higher unemployment rates among young people not in education. There is however differing potential of countries in integrating the low educated into the labour market. Poland which displays a relatively low rate of early school leavers is the worst performing member state in terms of unemployment rate among school leavers. This result highlights that the general higher education target as formulated in the Europe 2020 may not be the only one lever to reduce youth unemployment rates.

Figure 8. Unemployment rate of 18-24 year olds and early school leavers



EUSILC UDB 2007 – version 4 of August 2010 - Processed by Céreq -

4.3. Temporary employment of young workers: Differences among member states

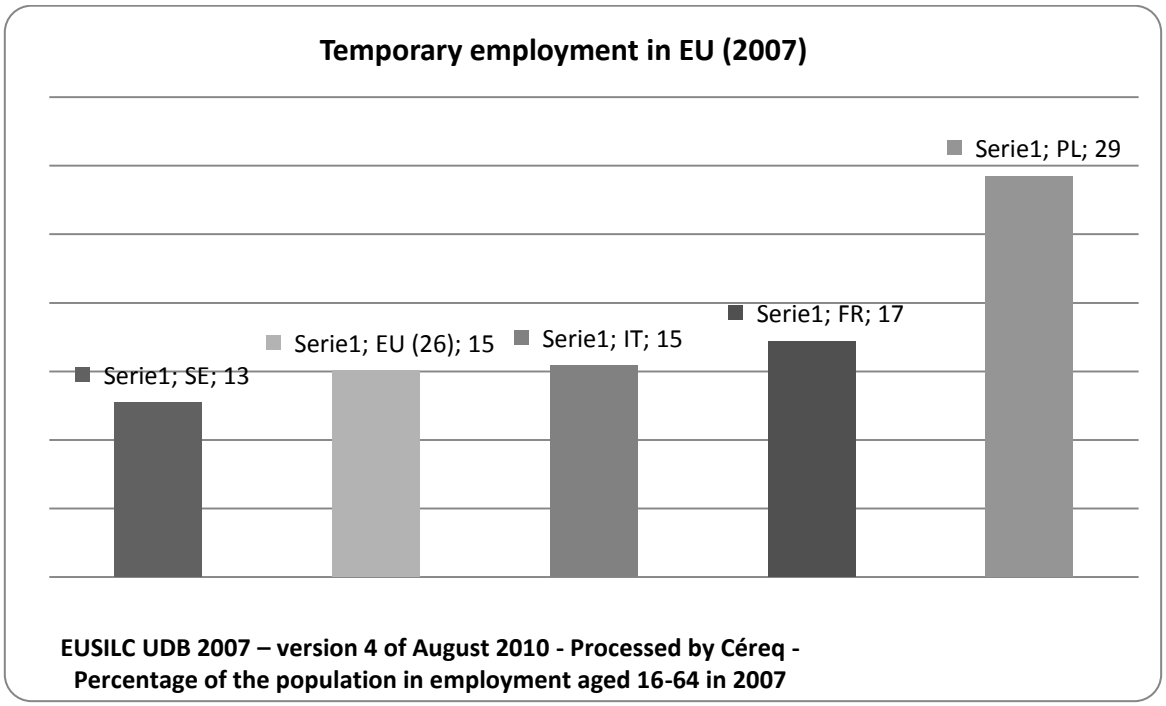
Guideline 7 of the Europe 2020 calls for increasing labour market participation. The European strategy sees work as the ideal situation for everyone, without taking account of work and employment quality or the person's specific circumstances. While the European targets do not address the issue of non standard employments, this paragraph as well as the following one looks at the development of these non-standards employment of early school leavers.

Temporary employment (the EU-SILC definition includes fixed-term contracts, seasonal work, non-permanent temporary agency work and specific training contracts) reached 15% in 2007. Figure 9 illustrates the country differences in the extent of temporary employment. Poland has the highest temporary Employment rate (even in EU-26). The share in total temporary employment is 29%. With an extremely high incidence of fixed-term contracts (29% among 16-64 year olds), particularly at labour market entry (83% among 18-24 year olds), the incidence of fixed term contracts is the far higher than the European average.

The high unemployment rate of the youngsters and their school –to-work transition difficulties first reflect the dualism of the labour market. The access to permanent job is

difficult for the young entrants. The comparison of temporary employment rates between young and older first leads to emphasize the strong exposition to job insecurity for young entrants on the labour market.

Figure 9. Temporary employment rate of 16-64 year olds



The figures display indeed large country differences in temporary employment. In general, the share of temporary employment in total employment is clearly linked to the rigidity of employment protection legislation (EPL) for workers with permanent contracts. In the context, where labour legislation provides little protection, the proportion of open-ended contracts is especially high and temporary work is not widespread, since permanent contracts do not confer any guarantee of stability on employees (Vero et al. 2012). While employment protection legislation aims to meet the challenge of real reductions of the exposure of workers to unfair actions by employers, these regulations may also cause increased costs for hiring and firing workers, and may therefore incentivize employers to use fixed-term contracts (Cahuc and Postel-Vinay, 2002).

There is substantial cross-country variation in EPL strictness for regular employees with highest scores for Sweden. Countries where EPL is strict, such as France, generally have stringent regulations both on dismissals and on the use of temporary forms of employment.

Italy made several reforms in the past 15 years, which created and eased the use of a multiplicity of atypical contracts, without however addressing the difficulty of dismissing workers with open-ended contracts. France and Italy have moderate levels of EPL for regular employees, but they have strict EPL for temporary employees.

Sweden is a country where employment protection is stringent and redundancy legislation more restrictive. Despite rendering the legislation on temporary work considerably more flexible, Sweden still affords a significant amount of employment protection. It is worth pointing out that the Swedish social partners are heavily involved in labour market regulation and are represented on parliamentary and governmental committees responsible for introducing labour legislation. Moreover, there are numerous sectoral and company-level collective agreements regulating issues such as working conditions, working time and job protection (Anxo and Niklasson, 2006).

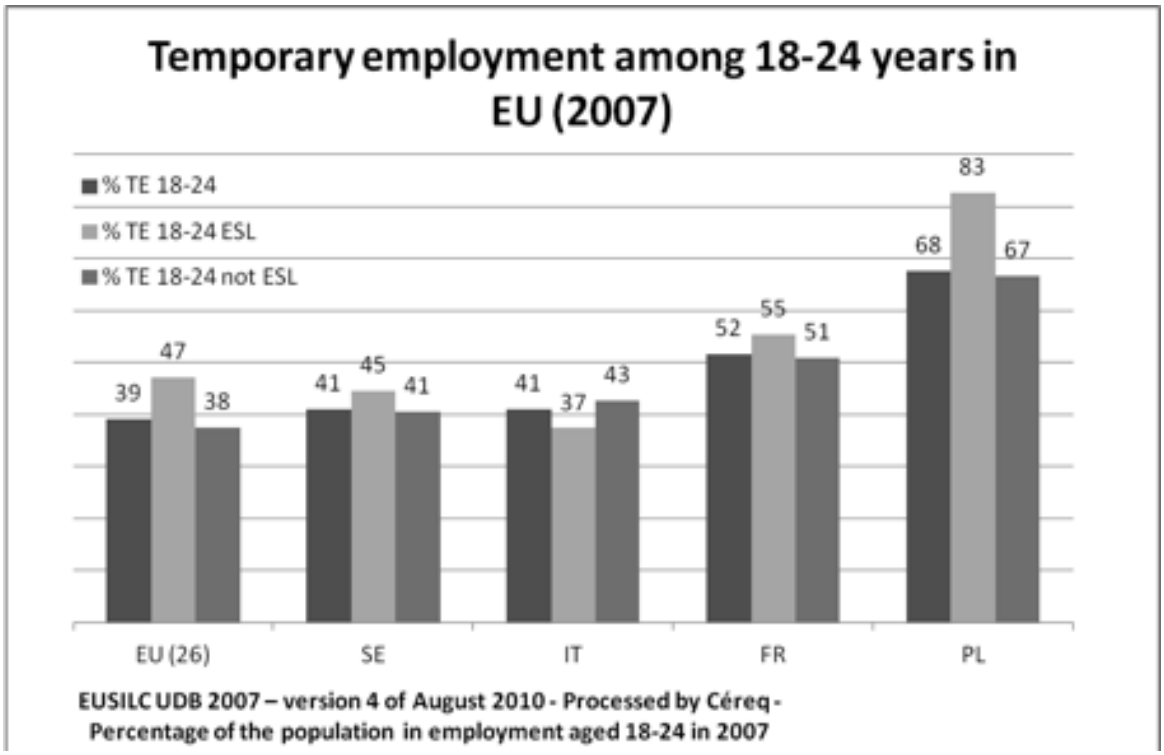
By contrast, Poland is characterised by a relatively free use of temporary contracts in a legislative framework where dismissals are relatively difficult. The regulations regarding fixed-term contracts are not strict in Poland, so Polish employers have both incentives and opportunities to use this form of employment (Baranowska et al. (2011). During the period examined in this study, there were no limitations on the total duration of fixed-term contracts. Fixed-term contracts can be terminated before the date specified in the contract by giving two weeks' notice in the case of contracts longer than six months. The incidence of fixed-term contracts is the second largest in Europe (after Spain, see European Commission, 2007).

Even if there are differences among the four member states in temporary employment, temporary contracts are most commonly held by young workers of 18-24 year olds (Figure 10). This pattern is replicated in almost all countries. On the EU26 average 39% of young workers (18-24 year olds). As in quite all European countries, the core workforce is still relatively protected, while young labour market entrants are most at risk of entering into fixed-term contracts. For example, for Polish youth aged 18–24, the temporary employment rate of 18-24 year olds is 68%, while it amounts 55% in France, 45% in Sweden and 37% in Italy.

As mentioned in table 10, early school leavers not only have lower employment rates, but, on average, also have even much higher temporary rates than those with higher educational level. The EU temporary employment averages are 47% for young early school

leavers and 38% on average for those of 18-24 year olds. It amounts 83% in Poland. Young young labour market entrants, specifically ESL, are most at risk of entering into fixed-term contracts. The educational system and labour market regulatory regime are important institutions that shape the outcomes of ESL.

Figure 10. Temporary employment rate of 18-24 year olds and early school leavers



On the one hand, when looking at the age when compulsory education ends in the four countries studied, only in Poland are pupils obliged to attend secondary education until the age of 18 which is also the age upon which a qualification of upper secondary education can be obtained. However, these countries have forms of part-time education (for example class-room education combined with apprenticeships) or "out-of-school" options for the last years of secondary education, meaning that fulltime compulsory education also ends around 15-16 years old. It could have had an effect on the rate of early school leavers in Poland which are in temporary employment. On the other hand, as mentioned by Baranowska et al. (2011: 777) "Poland has become an interesting outlier in Europe in terms of employment flexibility, with an extremely high incidence of fixed-term contracts, particularly at labour market entry". For ESL, compared to young people with higher level of education, the results

reveal that they are more likely to enter into temporary employment than permanent employment.

In only one country, namely Italy, are those with, at most, lower secondary education, somewhat less affected than those with higher education level. Until recently in Italy, students could leave school once they reached the age of 14. The compulsory school leaving age was raised to 16 years to bring the country into line with the rest of the EU.

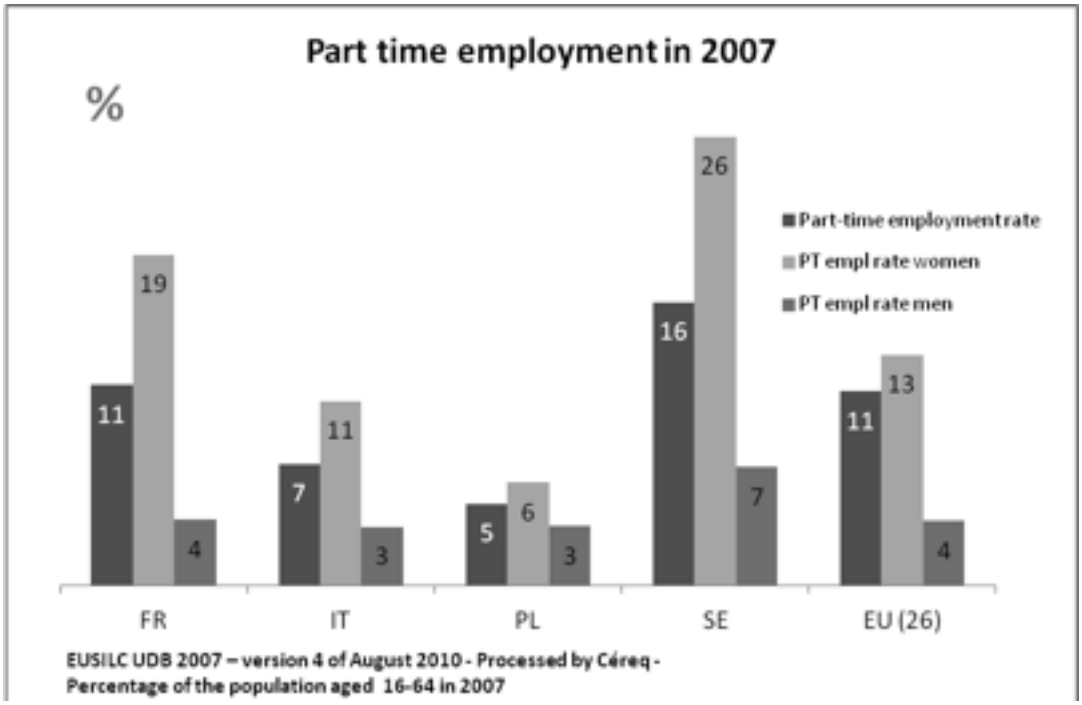
Nevertheless, the high ratio of temporary employment among the youngsters leads us to wonder about their effect on school-to-work transition. More generally, these outcomes raise the question again of the intensive mobilization of short-term contracts and of their potentially negative effect in the long term. Given that the school-to-work transition is a crucial stage in the employment career, and considering the high temporary employment rate among young people the focus is on the role of education level, which represents the crucial individual resource for a successful school-to-work transition.

4.4. Part-time employment

There are marked differences in part-time employment shares in Europe. Within the member states examined, part-time work varies from lows in Poland (5%), Italy (7%), to highs in Sweden (16%). EU-wide, like in France, the part-time employment rate amounts 11%. In addition, there is clear-ct relationship between women and men part-time employment rates.

These differences are mainly due to the unequal gender distribution of house and care work and large institutional deficiencies in many countries which hamper the possibility of combining care and full-time work. This relates particularly to the lack of full-time childcare facilities and among other things, to the lack of company-level work-life balance.

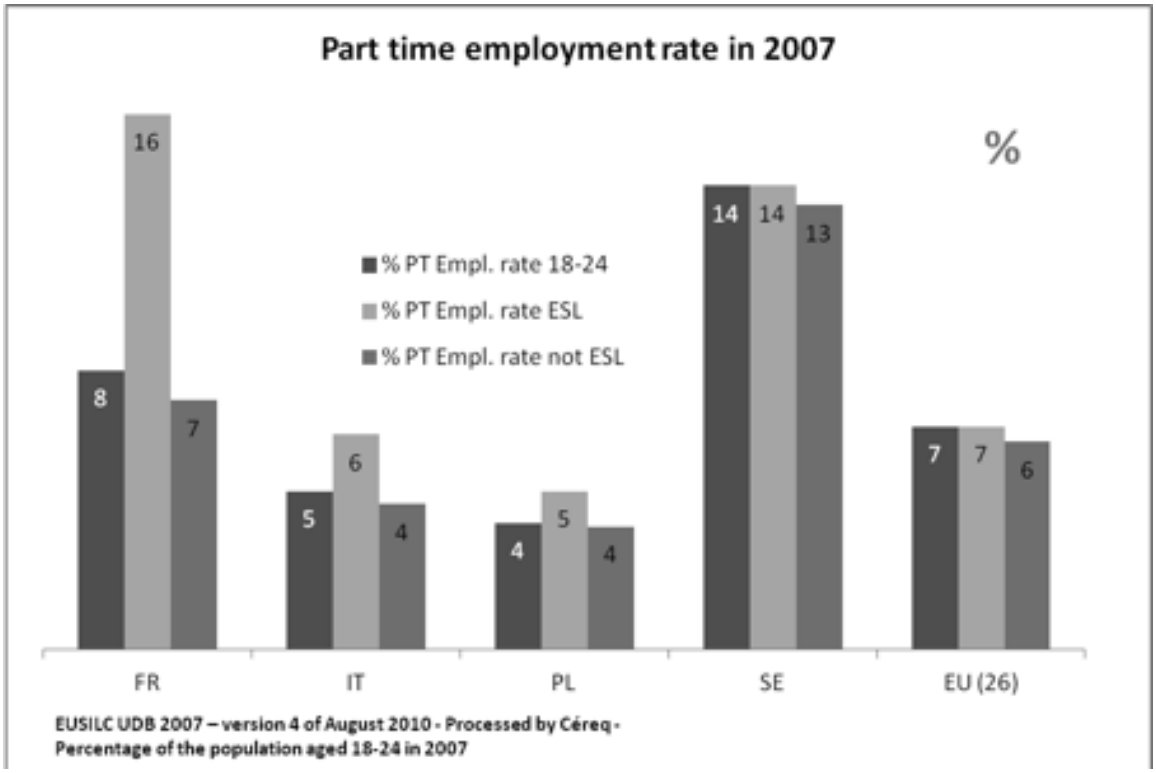
Figure 11. Part-time employment rate of 16-64 year olds and early school leavers



Many Swedish install contact programmes for employees on parental leave and frequently encourage male employees to take parental leave or to work part-time. Companies in France, Italy and Poland are more reserved when it comes to supporting employees before, during and after parental leave. And in these countries, the number of firms with only a few or no parental leave or parent promotion measures in place is extraordinarily high. The opportunity to work part-time during parental leave is given in 80.5% of the Swedish firms. In France, Italy and Poland the opportunities for employees to work part-time during their parental leave are noticeably fewer (Federal Ministry for Family, Senior Citizen, Women and Youth, 2010)

Part-time employment among early school leaver's doesn't takes place to a very considerable extent on the whole. In 2007 in the EU26, the rate of part time employment amounts 11%. However, the comparison of part-time work among the four countries under examination reveals that in Sweden the part-time job is much higher and rate amounts 16%. In Sweden part-time is more widespread than in Poland or in Italy. French establishments do not differ from European average ones.

Figure 12. Part-time employment rate of 18-24 year olds



Gender differences in the take up of part-time employment are evident. Part-time employment among young women early school leavers takes place to a very considerable extent all the more as they are ESL. In each country under examination, women represent the majority of those who work part time. We may think that women are choosing to work at part-time jobs in order to be able to strike a balance between work and family life. The next section is screening this issue

Figure 13. Part-time employment rate among men 18-24 year olds

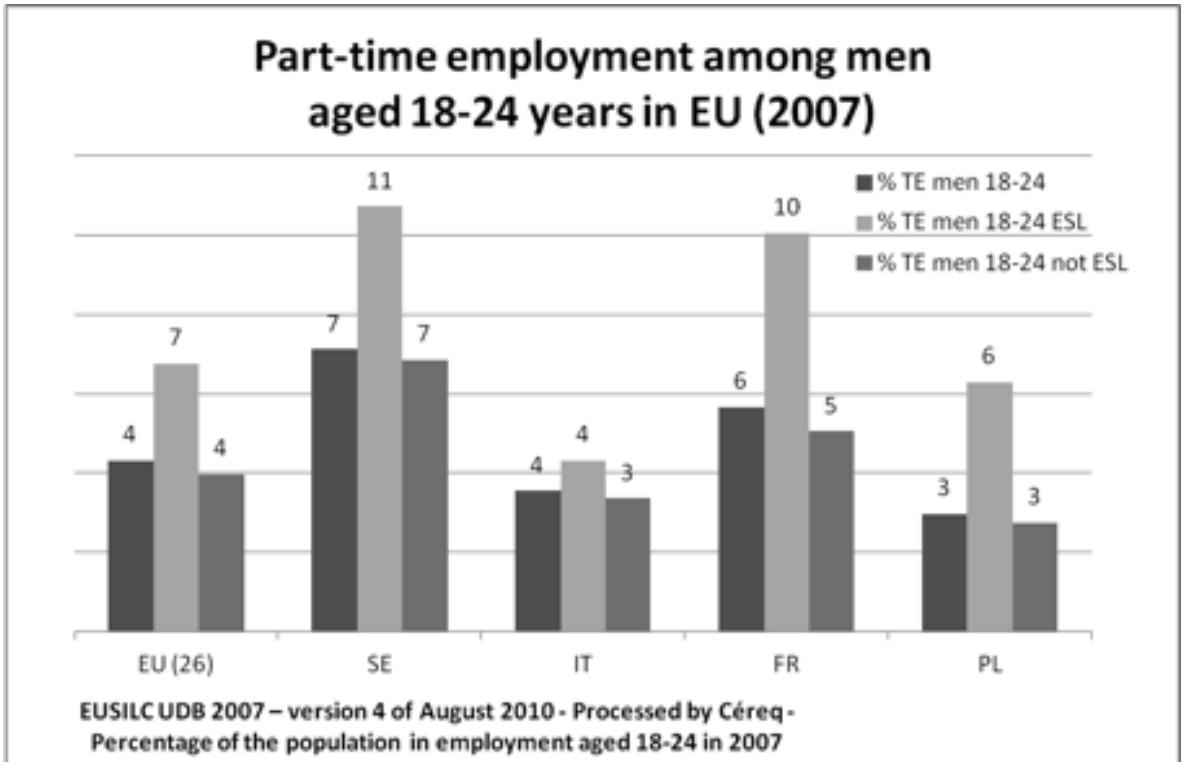
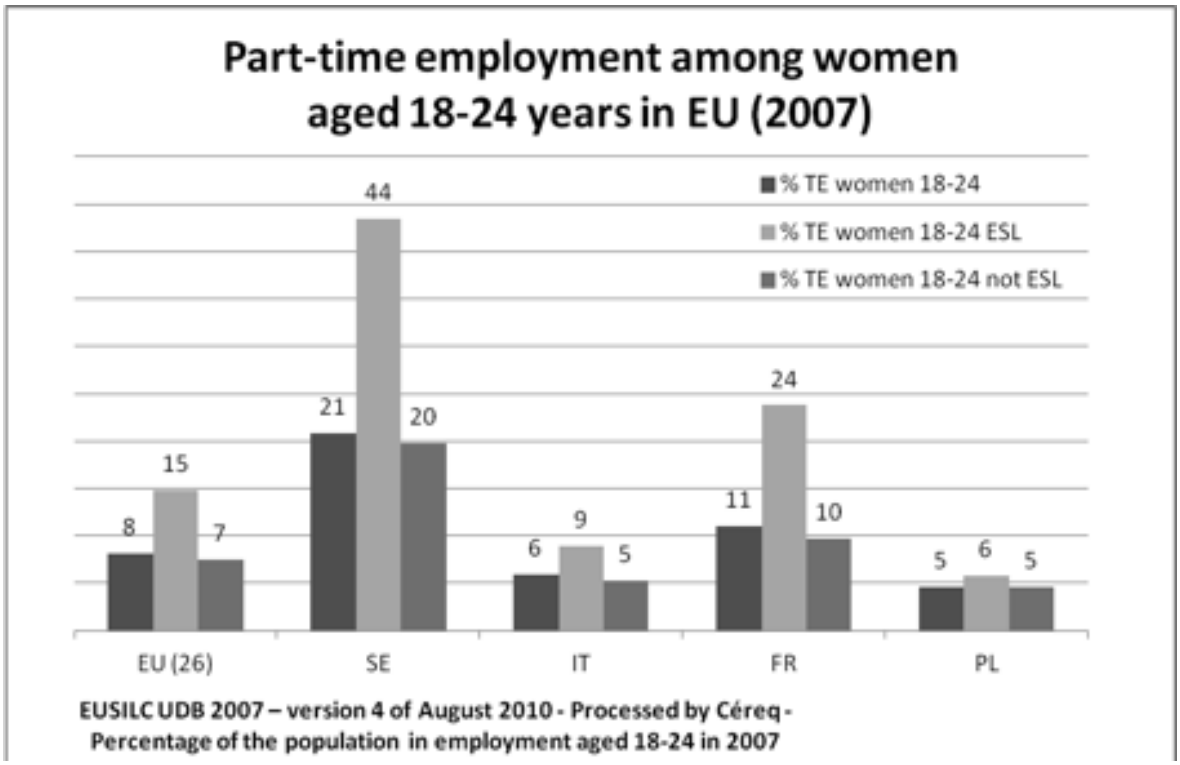


Figure 14. Part-time employment rate among women 18-24 year olds



5. Compulsory or voluntary or part-time employment?

A capability approach-inspired would refer back to an analysis of the scope of working possibilities. Moreover, the capability approach emphasizes the two essential dimensions of real freedom: empowerment (opportunity development), which enables people to acquire the resources of freedom, and respect for process freedom, which enables them to remain in charge of their own choices. The EU-SILC survey reveals that temporary employment is not far from being still taken up as a matter of choice.

Asked why they work less than 30 hours, in all of the countries reviewed, around 50% or even more of the young early school leavers declares that they want to work as the main reason. About three-quarters of ESL part-timers work less than 30 hours a week in 2007 without choosing this situation in Poland. The part-time work appears not to be a matter of choice for early school leavers. At the same time, "compulsory part-time employment" is a good indicator of underemployment, as it involves people working part-time who wish to work more.

Figure 16- Reasons for working less than 30 hours for 18-24, 2007- France

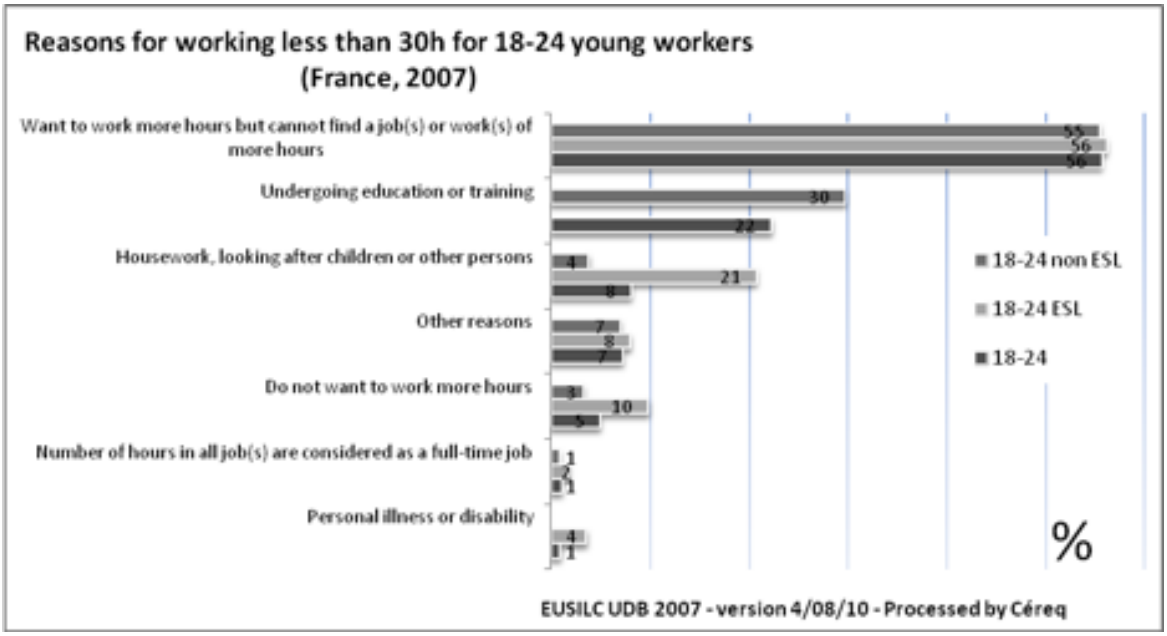


Figure 17- Reasons for working less than 30 hours for 18-24, 2007- Sweden

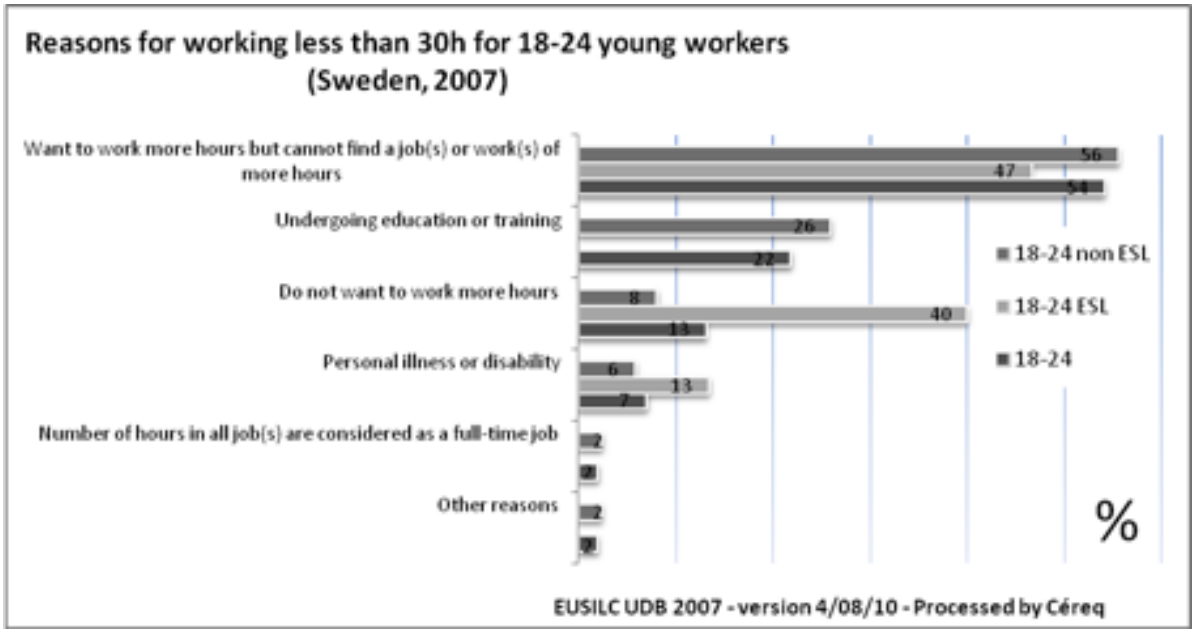


Figure 18- Reasons for working less than 30 hours for 18-24, 2007- Italy

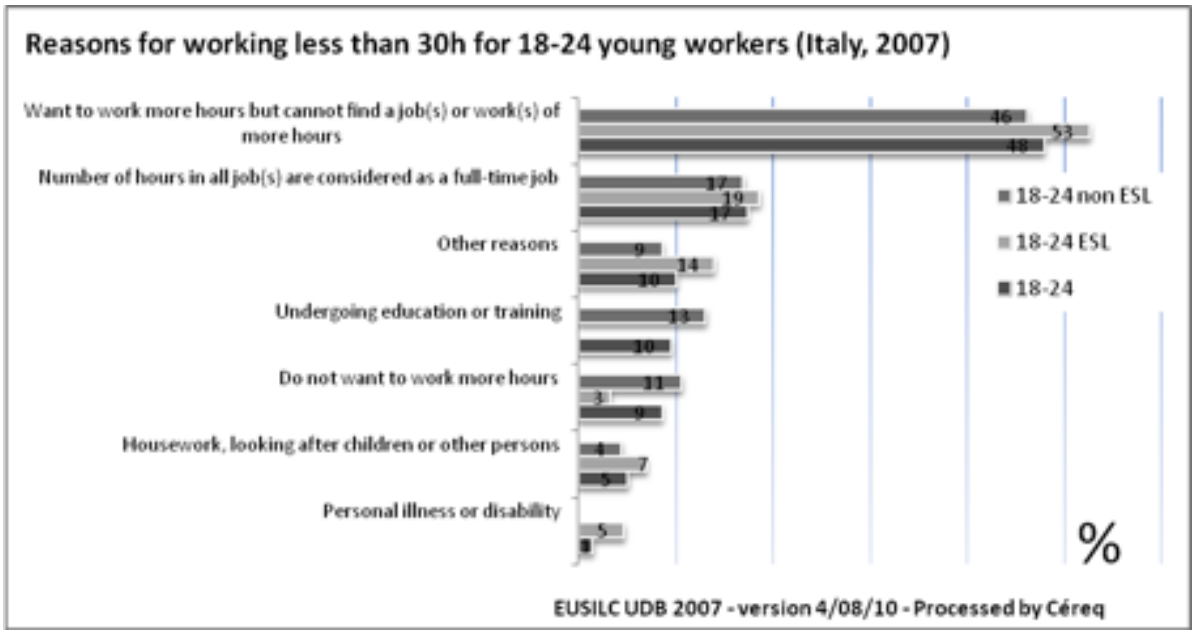
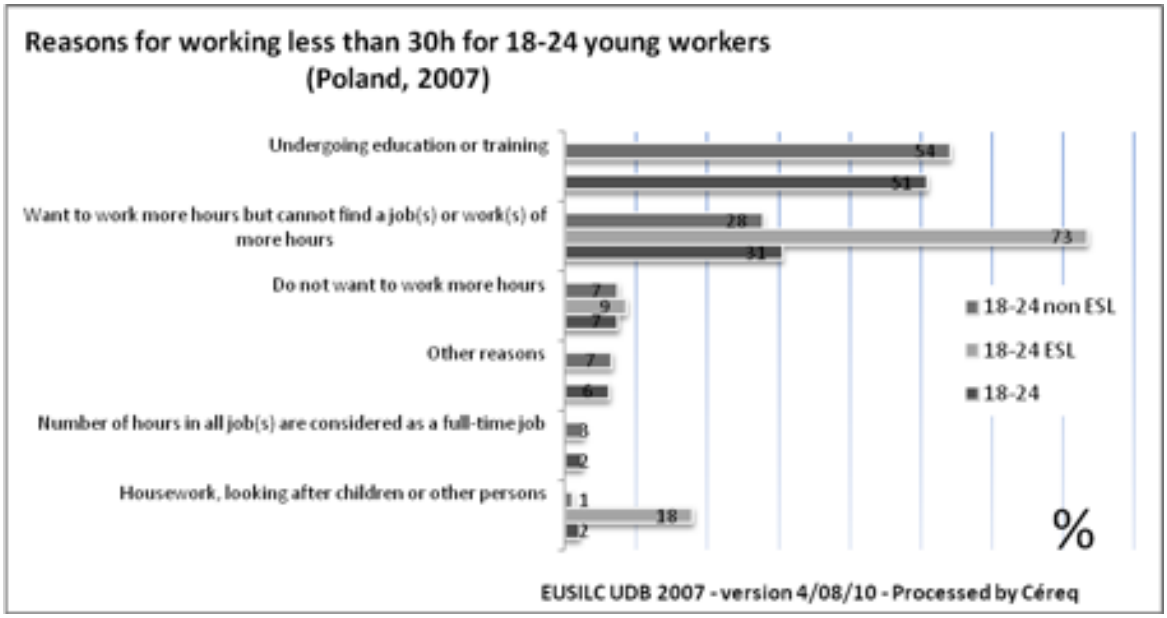


Figure 19- Reasons for working less than 30 hours for 18-24, 2007- Poland



5. Conclusions

The approach to addressing school-to-work transition developed here based a capability perspective can be thought as a first step adding to and going beyond the current dominant trend toward the dominant employment rate paradigm.

One key aim of this article was to explore how, through the cross-sectional EU-SILC, labour market outcomes could be best understood.

- On the one hand, beyond national specificities, the results display that the jobs available to early school leavers are most often temporary or compulsory part-time jobs. Besides, women participate more often work part time. However, the study on early school leavers reasons for working part-time reveal that the vast majority of part time employees "want to work more hours but cannot find a job(s) or work(s) of more hours' as the main reason for part-time employment. This result does not indicate a matter of choice, but rather a lack of capability of early school leavers to enjoy a work they have reason to value.

- On the other hand, the results disclose the limitations of the category of people aged 18-24 which is seen as irrelevant for analysing school-to-work transition in favour of a school-leaver category as a result of specific national educational systems and

second due to the to the higher probability of early school leavers to be employed just because they actually available on the market significantly sooner.

Although there is evidence that early school leaving affect labour market outcome of young adults these first results led to 1) extending the IBJ in order to have a dynamic perspective of the capability for work 2) analyse other factors than early school leaving influencing the inclusion into a sustainable path of employment quality. Taking up the plea for a longitudinal study of youth labour market outcomes as a means for a better understanding of school-to-work transition and the capability for work, the next chapter will describe pathways of European young people who left school regarding their level of qualification and ask, among others, whether active labour market spending are liable to promote their capability for work, using the longitudinal set of EU-SILC; 3) argue in favour of the “school leavers” category instead of the “age group” to analyse labour market outcomes.

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INSET 1

The EU-SILC survey : The reference population of EU-SILC is all private households and their current members residing in the territory of the MS at the time of data collection. Persons living in collective households and in institutions are generally excluded from the target population.

EU-SILC cross-sectionnal 2007

EUSILC UDB 2007 – version 4 of August 2010

Ensemble des pays

Procédure FREQ

PB020	Fréquence	Pctage. Pourcentage	Fréquence cumulée	Pctage. cumulé
AT	13391	3.04	13391	3.04
BE	12322	2.80	25713	5.84
CY	8470	1.92	34183	7.76
CZ	19384	4.40	53567	12.16
DE	26291	5.97	79858	18.13
DK	11610	2.64	91468	20.77
EE	11971	2.72	103439	23.49
ES	28656	6.51	132095	29.99
FI	21773	4.94	153868	34.94
FR	20357	4.62	174225	39.56
GR	12346	2.80	186571	42.36
HU	18490	4.20	205061	46.56
IE	10892	2.47	215953	49.04
IS	6567	1.49	222520	50.53
IT	44629	10.13	267149	60.66
LT	10913	2.48	278062	63.14
LU	7913	1.80	285975	64.94
LV	9270	2.10	295245	67.04
NL	19623	4.46	314868	71.50
NO	11706	2.66	326574	74.15
PL	34888	7.92	361462	82.08
PT	9947	2.26	371409	84.33
SE	14204	3.23	385613	87.56
SI	24730	5.62	410343	93.18
SK	12573	2.85	422916	96.03
UK	17484	3.97	440400	100.00

Inset 2: The International Standard Classification of Education (ISCED)

The International Standard Classification of Education (ISCED) is the basis for international education statistics, describing different levels of education, as well as fields of education and training (30). The current version, ISCED 97 distinguishes seven levels of education:

_ **ISCED level 0:** pre-primary education – defined as the initial stage of organised instruction; it is school- or centre-based and is designed for children aged at least 3 years;

_ **ISCED level 1**: primary education – begins between 5 and 7 years of age, is compulsory in all countries and generally lasts from four to six years;

_ **ISCED level 2:** lower secondary education – continues the basic programmes of the primary level, although teaching is typically more subject-focused; usually, the end of this level coincides with the end of compulsory education;

_ ISCED level 3: upper secondary education – generally begins at the end of compulsory education; the entrance age is typically 15 or 16 years and entrance qualifications and other minimum entry requirements are usually needed; instruction is often more subject-oriented and typical duration varies from two to five years;

_ISCED level 4: post-secondary non-tertiary education – straddles the boundary between upper secondary and tertiary education; typical examples are programmes designed to prepare pupils for studies at level 5 or programmes designed to prepare pupils for direct labour market entry;

_ ISCED level 5: tertiary education (first stage) – entry normally requires the successful completion of level 3 or 4; includes tertiary programmes with academic orientation which are largely theoretically based and occupation orientation which are typically shorter and geared for entry into the labour market;

_ ISCED level 6: tertiary education (second stage) – leads to an advanced research qualification (Ph.D. or doctorate).

Source: Europe in Figures, Eurostat yearbook 2008

Inset 3

ET2010 for the Lisbon Strategy	ET2020 for Europe2020
1. To reduce the percentage of early school leavers to no more than 10%. 2. To ensure that at least 85% of young (20-24 year old) people complete upper secondary education. 3. To cut the percentage of low-achieving pupils in reading by at least 20%. 4. To increase the number of university graduates in mathematics, science and technology (MST) by at least 15%, and to decrease the gender imbalance in these subjects. 5. To have 12.5%of adults (25-64) participate in lifelong learning.	1. The share of early leavers from education and training should be less than 10%. 2. The share of 30-34 year olds with tertiary educational attainment should be at least 40%. 3. At least 95% of children between 4 years old and the age for starting compulsory primary education should participate in early childhood education. 4. The share of low-achieving 15-year olds in reading, mathematics and science should be less than 15%. 5. An average of at least 15 % of adults (25-64) should participate in lifelong learning.

Data source: European Commission (2009b).

G. Would active labour spending enhance the capability for work of entrants. Empirical evidence from 21 European countries

Marion Lambert, Josiane Vero, Bjorn Halleröd, Hans Ekbrand

Abstract

Activation has become one of the keys to integrate people into the labour market at the European level. The implementation of these policy lines raises acute questions as to whether the conditions are actually met in order that young entrants can exercise their responsibility and take part in the labour market while promoting respect for their real freedom to choose the work they have reason to value. The capability approach is used here to understand how individual and environmental factors interactively affect processes that lead to a capability for work. The paper shows that there is a lack of evidence that active labour market expenditures are effective in achieving their goal of inserting people into a process of employment quality and enhancing their capability for work..

Keywords: Early school leavers, active labour market policies, capability approach

1. Introduction

This chapter attempts to spell out the links between active labour market expenses and the capability for work of young entrants on the labour market. ALMPs can help unemployed workers return into employment more quickly and are a prominent feature of, for example, Denmark's "flexicurity" model. However, the overall cost effectiveness of such measures is ambiguous. Using multilevel modeling, the paper highlights that while ALMPs may increase employment rates for targeted groups, this may be to the detriment of the capability for work. It is argued that the claims made for the beneficial effects of raising the employment rate turn out to be right while the effect on raising the capability for work with a dynamic view of this phenomenon is not substantiated; the effects are often relatively poor in practice as there is a is a lack of evidence that they are effective in achieving their goal of inserting people into a sustainable path of employment quality.

Activation policies have become a matter of growing importance in response to the converging pressure of economic globalization and the political "modernization" of social welfare. Thus, employment policies have undergone strong reforms since the beginning of the 1990's in all developed countries. The main lines of these reforms relied on a theoretical paradigm resulting from the unemployment economic theory in which income support policies must be made more incentive to job search while schemes which result in lower labour costs are developed (including cuts in social security contributions) in order to stimulate employment, as well as job search or training schemes for the unemployed. This set of reforms usually summed up by the word "activation" plays out differently regarding the specificities of national institutions and policies. However it has generally resulted in a reduced generosity of unemployment insurance, the development of social contributions related to employment (negative income tax), the strengthening of employment services (often involving institutional reforms meant to improve efficiency), the incitation and even obligation to accept an active program of employment policy after a certain unemployment period (Erhel, 2008). This shift from demand-side policies to supply-side policies is determinant. It no longer comes to insuring macroeconomic conditions favorable to the capability for work, but to acting on work offers, assessing the individuals looking for a job and providing them with the measures considered as the most suitable to their reintegration into the labour market.

The inclusion of young people from disadvantaged backgrounds has become a priority on the agenda of the European Union. In this perspective, the most vulnerable groups (namely more particularly the unskilled youth, immigrants, etc.) are those who are the most targeted by activation logics. Young benefit recipients should be encouraged (via making work pay programmes) or constrained (via workfare schemes) to quickly reintegrate the labour market (Bonvin and Orton, 2008). In this perspective, activation aimed at increasing people's readiness to acquire the qualities that are needed for the labour market. This usually involves acquiring knowledge and skill, which makes the link between employment and education, put at the forefront the issue of employability. The rationale that underpins these debates is the increasing demand for a more highly educated and skilled workforce in a knowledge dependent economy. These evolutions are in line with the desire to raise employment rates, which lies at the heart of the European strategy (Salais, 2006): it sees work as the ideal functioning, without taking account of work and employment quality or

the person's specific circumstances (i.e. his or her physical, psychological or other ability to work, to balance work and family life, etc.). This perspective therefore views activation from the angle of adapting to labour market requirements and issues related to quality of life or work are left aside. In addition, this trend is part of the more global transformation of public policies also characterized by a more frequent use of contractualisation, individualisation and accountability (Badan et al., 2003). Here the stress is put on individual responsibility and individual ability to manage their labour market trajectory and integration into the labour market.

The capability approach, drawing on Amartya Sen's concept provides a yardstick to assess both limits and dangers of activation policies. It also provides an alternative yardstick for the design, implementation and evaluation of labour market policies. The Capability Approach (CA), initiated by A. Sen, provides an analysis frame to reconsider the relationship between freedom and responsibility. It develops a demanding conception of freedom based on democratic participation, opportunity access and the power to act. Capabilities aim at giving an actual content beyond its formal aspects, to the concept of freedom. One of the specificities of the approach is thus to combine a descriptive assessment prospect of the freedom to act with a normative prospect which makes the equal distribution of this freedom a principle of justice (Sen, 2009). At the core of the capability approach, exercising any responsibility requires a scope of choice between various possible options and a power to convert the chosen option into an actual achievement. As a consequence, if early school leaver's are called to become « active player of their professional pathway" this implies from a normative point of view that they are given the means which enable them to take this responsibility. From a descriptive point of view, it means thinking about the different factors that act on the exercise of the individual responsibility.

The paper is articulated as follow. In section 2, the notion of capability will first be used to challenge the concept of activation on which the European Policy debate has been focusing and to explain the shift of emphasis involved by the idea of capability for work. In section 3, using the EU-Statistics on Income and Living conditions (EU-SILC) we will shed light on the diversity of the young entrants on the labour market. Our aim is to answer to three specific question; 1) what type of dominating labour market trajectories exist among young European who left school? 2) Are there substantial differences among between early

school leavers and the average population of this group age? Using multilevel models the fourth section assess individual social and environmental circumstances (i.e. the conversion factors) that enable young people to control their mobility with a specific emphasis on the role of ALMP on the capability for work viewed in a dynamic perspective. Does the ALMP spending matter in terms of its impacts on labour market outcomes? How large are its effects on the various trajectories identified? Does it secure professional pathways? What other factors affect the capability for work? Section 4 provides an empirical analysis to answer these issues while section 5 concludes.

2. Active labour market policies and the capability approach

This section will be in two parts. First, the focus will be on a general introduction of the ALMP. Second, we will tackle the capability approach as an alternative yardstick against which public policies in this field is to be assessed.

2.1. On ALMP: European Policy trends

Since the 2000 Lisbon strategy, policies that support active labour market policies have been all the time more favoured at the European policy-making level. The expectations raised by ALMP have never been higher: instituted as one of the components of the flexicurity, ALMP is intended not only to protect workers by improving their employability but also to promote employment as well as benefiting the community by boosting overall competition. Almost ten years on, the Europe 2020 strategy and the related guidelines 7[8] and 8 on member states' employment policies look like the Lisbon strategy regarding its instruments which call for strengthening, among others, ALMP (ETUI, 2011). Having described the level of spending on labour market policies in different countries, we will emphasize the thinking behind ALMP.

2.2. Active and passive labour market expenditures

Over the 1990s, it has been pointed that most EU countries spend relatively little on Active Labour Market Policies as compares to "passive" unemployment benefits. This has been

[8] Guideline 7 « increasing labour market participation »

advanced as an important explanation of unemployed persistence in these countries. Accordingly, several policy document were endorsed a shift of expenditures towards spending on active labour market programmes (Calmfors L., P. Skedinger (1995). As they were in the Lisbon strategy, active labour market policies are recommended in Europe 2020, as one important instrument for fostering labour market transitions (ETUI, Ibid.).

Eurostat's labour market policy (LMP) statistics provide information on labour market interventions, which are government actions to help and support the unemployed and other disadvantaged groups in the transition from unemployment or inactivity to work. LMP expenditures include the costs of services for jobs-seekers provided by the Public Employment services (LMP services), the cost of “active” interventions such as training and employment incentives to help the unemployed and other target groups as well as “passive” supports, which mostly refer to unemployment benefits. In contrast to passive policies, the focus of ALMP is to increase the employability of unemployed workers. Seven broad categories of ALMP are distinguished: labour market services; training; job rotation and job sharing; employment incentives; supported employment and rehabilitation; direct job creation; and start-up incentives (Cf. Inset 1).

The level of spending on labour market policies differs widely across European countries. Chart 1 shows expenditure on active labour market policies as well as on passive labour market policies as a percentage of GDP in 2008 (latest available data). In 2008, the highest overall expenditure is recorded for Belgium. Expenditures on both passive and active labour market policies as a fraction of GDP ranged from about 3% in Belgium to 0,25% in United Kingdom or Estonia while the average expenditures amounts to 1,5%. Among the EU10 countries under examination, only the UK has a very low spending level (while Greece is outside Eurostat’s LMP dabase in 2008). Outside the United Kingdom, there is a clear difference between old and new Members states in labour market spending. The oldest member states quite all spend above the EU average.

In addition, the fraction of spending on active versus passive policies differs across member states. On average, European member states devoted 68% of labour market expenditures to PLMP (Cat 8-9) and 32% of ALMP (cat 2-7). The highest expenditure for ALMP (as percentage of GDP) is evident in Belgium, Denmark and the Netherlands. Countries with particularly low spending are United Kingdom, Estonia and Lithuania. However, in Poland and Sweden, the

vast majority of expenditure went to ALMP (respectively 57% and 58%), followed by Lithuania (48%) and Denmark (47%). Thus, while recent member states spend less than the older, there is no actual difference in breakdown of expenditures between ALMP and PLMP between the two categories of member states.

Chart 1. Relative labour market policy spending, 1998

2.3. The thinking behind active labour market policies toward young people

A stronger focus is now placed on the youth, education and better skill matching, as well as on labour market transitions. Given the constantly high youth unemployment rates, these policies are targeted at individuals through demanding a change of behaviour. Activation policies aim at « activating » social expenses in order that their recipients find a job again as quickly as possible through financial incentive or constraints (schemes or programmes called

« workfare ») where the recipients are automatically attributed some tasks, most of the time, not requiring any skill or qualification and without any professional perspective.

Following Moachon and Bonvin, we may say that

> "as a consequence, the main purpose of welfare is not to guarantee a minimum level of material well being via the payment of cash benefits, but to promote individual agency, i.e professional and social integration, via training programmes" (Moachon and Bonvin,2010),

as the cash welfare state is suspected to foster passivity among its beneficiary, which may in turn result in long-term unemployment and social exclusion. Strategies of activation are therefore to be seen in the context of changing welfare states (Spohrer, 2011). As a consequence, while on the one hand, individuals are made more attractive to employers through training and financial incentives, they are also expected to increase their job search activity.

It exists various forms of activation according to countries and their tradition. However, as underlined by Moachon and Bonvin (2010), their legitimacy is considered as self-evident and is barely questioned. Nevertheless this goal coincides with an increasing focus on individual responsibility. In this context the main responsibility for dealing with unemployment lies with the individual. It is not simply taken to mean that the causes of unemployment are individual but also in terms of making the individual responsible for implementing strategies to find work (Crespo, Serrano Pascual, 2004). This change in the way which responsibility is depicted has come about as the discourse of the knowledge society has gained currency.

In some respects**,** the transfer of responsibilities which aims to be resolutely innovative matches with both trends of the development of a "knowledge society" and the promotion of "employability strategies" which are increasingly favoured at the European policy-making level. Although the development of employability is a notion which has itself been subject to numerous definitions (Gazier 1990; Bonvin and Farvaque 2006), it is aimed at fostering individual's ability to gain or maintain employment, move between roles within the same organization if required by stressing the responsibility of the employee to participate in lifelong learning. This usually involves acquiring knowledge and skills, which makes employability the link between employment and training.

However, the shift in responsibilities is ambiguous in so far as it encourages the individual's freedom of action but it means at the same time that young people from disadvantaged backgrounds themselves may now have to shoulder the blame for not being employed. Still, in the school-to-work transition, the real freedom to choose the work one has to value is not only up to the youth. Therefore, the question raised is to know whether the conditions are actually met in order that young from disadvantaged background can exercise their responsibility and take part in the labour market while promoting respect for their real freedom to choose the work they have reason to value.

However, as a matter of priority, the ultimate objective of active labour market policies is twofold: first maximising the employment rate at the macro level and second reaccelerating the reintegration into the labour market at the micro level (Bonvin and Orton 2010, Salais, 2010, Bonvin and al. 2011, Vero and al. 2012). The debate is then reduced to the maximisation of the employment rate regardless the nature of the employment.

However, indicators cannot be regarded as an objective description of the world; they provide a partial image of it by selecting one specific informational basis to the detriment of others. In this way, they also require to reconfigure the reality observed in the sense of their underlying values and standards. Indeed, even when indicators are based on objective and irrefutable information, they espouse value judgements, often passed over in silence or taken for granted, about the relevance of information worth retaining at the expense of other facts deemed inappropriate. Sen designates this inescapable partiality of the indicators with the notion of 'positional objectivity', which stresses the fact that, depending on our position, we tend to prioritize a point of view on the reality that we observe, to the detriment of other viewpoints (Sen, 1993). Hence there is no such thing as absolute objectivity, neither in scientific knowledge nor in ethical reasoning. A player's notion of what is a fitting description of reality depends on his/her position or situation. Besides, selection of the informational basis not only has descriptive effects (in that it emphasizes one specific way of describing reality); it likewise has the effect of transforming this reality. With the indicators, as a matter of fact, emphasis is also placed on the relationship between description and prescription. Describing situations means making choices and attracting the attention of public decision-makers and public opinion to the issues regarded as most

important. Devising indicators is not merely aimed at describing what exists or analysing practices; it is first and foremost a policy move connected with a prescriptive dimension.

By focusing on the employment rate, the experts in the Indicators Group of the Employment Committee (EMCO) cannot of course evade this need to select a specific informational basis and the condition of positional objectivity, which lies behind every epistemological approach. It is therefore necessary to ask ourselves about the normative and informational foundations of this indicator.

2.4. ALMP through the lens of the CA

The CA developed by 1998 Economic Nobel Prize winner A.K. sen (1985, 1997) offers stimulating way to tackle this question. Initially developed by the Indian economist and Nobel prize winner Amartya Sen, the CA has contributed to renew the debates worldwide on inequality and poverty (Sen, 1992), human development (1999) and social justice (2009). Its influence reaches far beyond academic audiences. It has shaped the work of the United Nations Development Program and its human development index (UNDP, 2011), and the most recent Poverty and Wealth Reports by the German Government (Arndt and Volkert, 2011), not to mention the search for alternative GDP measures initiated by France's President Sarkozy (Stigtlitz, Sen and Fitoussi, 2009).

Although originally conceived for developing countries, the capability approach is now used to address a whole range of issues in post-industrial countries as well, such as gender (Nussbaum, 1999; Robeyns, 2008, 2010), education (Saito, 2003; Otto and Ziegler, 2010), and poverty (Schokkaert and Van Ootegem, 1990; Brandolini and D'Alessio, 1998; Vero, 2006; Chiappero-Martinetti, 2007). Over the last decade, it has also been progressively extended to the study of work and employment. First adopted in this area as a yardstick against which to assess European labour market policies (Salais and Villeneuve, 2004; Formation Emploi, 2007), it has subsequently proved a robust tool for studying flexicurity and activation policies (Bonvin and Orton, 2009; Verd and Vero, 2011), New Public Management indicators (Salais, 2006; Vero et al., 2012), and corporate policies (Zimmermann, 2004, 2011; Abbateccola et al., 2012).

After highlighting the shift of emphasis introduced by the CA, we discuss how to handle time in a dynamic perspective.

2.5. The shift of emphasis introduced by the CA: employable or capable of?

According to Robert Salais,

> 'the upheaval introduced by the capability approach relates to the choice of the (yardstick against which collective action (policies, legislation, procedures) should be devised, implemented and assessed. For Sen, the only ethically legitimate reference point for collective action is the person, and specifically his situation as regards the amount of real freedom he possesses to choose and conduct the life she/he wishes to lead' (Salais, 2005: 10).

The Capability Approach (CA), initiated by A. Sen, provides an analysis frame to reconsider the relationship between freedom and responsibility. It develops a demanding conception of freedom based on democratic participation, opportunity access and the power to act. Capabilities aim at giving an actual content beyond its formal aspects, to the concept of freedom. One of the specificities of the approach is thus to combine a descriptive assessment prospect of the freedom to act with a normative prospect which makes the equal distribution of this freedom a principle of justice (Sen, 2009). At the core of the capability approach, exercising any responsibility requires a scope of choice between various possible options and a power to convert the chosen option into an actual achievement. As a consequence, if young people from disadvantaged backgrounds are called to become active player of their school-to-work transition this implies from a normative point of view that he is given the means which enable him to take this responsibility.

This perspective sets out an ambitious way forward for public policy-making, which is not merely about enhancing people's adaptability to labour market requirements but first and foremost about promoting their real freedom to choose the life they have every good reason to lead. Collective action is therefore expected to develop opportunities for people while acknowledging their free choice with regard to ways of living or being. Central to this endeavour is the capability for work, i.e. "The real freedom to choose the work one has reason to value" (Bonvin and Farvaque, 2006).

By contrast, as mentioned by Bonvin and Vielle (2008),

> "activation has been developed with the aim of increasing employment rates, and, given the ongoing modernisation of labour law, this central focus on the issue of employment means that social issues (quality of social integration and quality of life in general) are being reduced to the question of employability seen as adaptability to the needs of the labour market" (Bonvin and Vielle, 2008).

The Lisbon Strategy employment targets were a 70% employment rate for the overall population, to be reached by 2010. These targets are not calculated in full-time-equivalent employment, whatever task is taken into account what ever its duration, the number of hours worked per week, the status, etc. (in short, its quality) providing it is considered as a "job" by the statistical source used, National or European. Three employment rates appeared nevertheless in the list of the indicators used: by sex, for the 15-24 year-olds, long term unemployment (12 moths and beyond). In early 2010, the European Commission launched a new strategy for the next decade, the Europe 2020 Strategy, to support recovery from the crisis and to set out where the EU wants to be by 2020. Despite the failure to achieve the Lisbon Strategy targets, the Europe 2020 strategy formulated a new ambitious employment rate target of 75% to be reached by 2020. The new employment rate target (formulated for the EU as a whole) refers to the adult population (20-64 years) only, thereby avoiding conflict with the education goal (European Commission 2010). Hence, activation policies promoted by the European Commission since 1997, and even a long time before it by the OECD are aimed at increasing employment rate at the expense of other aspects of quality of work and quality of life, while these aspects are central in the frame of the CA.

2.6. The capability for work in a dynamic perspective

Following Bonvin and Farvaque (2006), capability for work is "the real freedom to choose the work tne has reason to value". It is therefore recognised that moving over to a capability approach-inspired vision would entail a number of developments. First the employment quality issue would need to be integrated into a synchronic and dynamic perspective, referring back to '*an analysis of the scope of working and living possibilities offered by inclusion in employment*' (Salais and Villeneuve, 2004: 287). Moreover, by contrast with the normative foundations of activation as measured by the employment rate,

the capability approach emphasizes the two essential dimensions of real freedom: empowerment (opportunity development), which enables people to acquire the resources of freedom, and respect for process freedom, which enables them to remain in charge of their own choices. Should one of these two dimensions be lacking, the goal of developing capabilities is missed.

By the same vein, these requirements are the yardsticks against which the capability for work is to be assessed. Identifying capability-friendly labour market pathways implies a combination of information related to the set of valuable opportunities to be completed by information regarding the possibility to voice one's preferences, wishes, expectations, etc and to make them count in the decision-making process. Therefore, the question raised is to know whether the trajectories of youth can be assessed on the base of both essential dimensions of real freedom. However, embodying freedom into labour market trajectories is very demanding from an informational point of view and the EU-SILC database fails in ensuring information that might allow analysing labour market trajectories from the point of view of the dividing line between imposed and voluntary mobility. The survey doesn't allow taking into account whether jobseekers' or workers' claims will shape the end result of the regulation process, even if a capability approach would require that they must be able to effectively voice their concerns and to be listened to. .In a practical ground we must adopt a reasonable compromise to face this issue.

For the most part, literature on the CA has been limited to information spaces that are static while sustainable developments like working lives are in fact dynamic and would be probably best understood in an evolutionary perspective. Several papers address a question which has not been at the core of the reflection in the literature on capability: how to handle time? Recently Comim (2003) tried to go beyond the simple acknowledgement of the importance of time and investigated "the implications of expanding even further the informational space put forward by the CA towards concerns with time and temporal aspects to the CA". He argued that "becoming", in addition to "being" and "doing", is a key category of analysis and that this addition to the capability informational space is consistent with its emphasis on processes and the role of valuation activities. Some guidance is offered by the following approaches.

Some authors address the time dimension explicitly with the objective of arriving at a renewed basis of judgement in the measurement of poverty and social exclusion. The main idea is to analyse whether the lack of capability in certain dimension occurs for a number of periods in time (Comim and al. 2008). If relevant information is available across time, one would then be able to judge whether a person's failure to achieve a minimally adequate level of capability in some dimension is just temporary or chronic. Papadopoulos and Tsakloglou (2008) echo the same idea when they develop an approach to the measurement of social exclusion using the CA. If deprivation in certain dimensions occurs for a number of periods in time, it constitutes a lack of capability.

The perspective outlined above implies that if capability for work is to be assessed over a sufficient long time, what matters is the possibility but also the probability to achieve a valuable pathway and to escape from unfavourable trajectory for a number of period in time. Of course, the plurality of views about what is a "valuable work" or a "valuable pathway" compels us to avoid one-fit-all definitions of "job quality" or "capability for work", as these need to take into account the viewpoints of all people concerned (Bonvin, 2012). The issue at stake is not claiming that one pathway is more valuable than another one for a given person but rather to ask whether the young people under review have the real capability for work and how as well as which various conversion factors matter in the enhancement of this capability. It is then suggested that the approach can be fruitfully limited to a dynamic analysis deprivations for a number of periods in time. We would then consider that if people are chronically without any job or only bad jobs and in the same compelled to go back to labour market then it will not coincide with enhanced capability for work.

3. Labour Market trajectories of young European entrants

The aim of this section is to describe the diversity of paths followed by young people who either drop out or finish education prior of the first wave of the EU-SILC (2005 or 2006). Our aim is to answer three specific questions: (1) what type of dominating labour market trajectories (LMT) exist among people aged 16-30 who left school? Are there substantial differences between early school leavers and the average population of this age group?

3.1. Data and labour market trajectories

3.1.1. The survey

To that aim we will use the EU-SILC longitudinal data from 2007 and 2008 from 21 countries. Since our analysis build on longitudinal data we are forced to restrict our analysis to countries that are covered by the EU-SILC data. The include countries are: Austria, (AT), Belgium (BE), Cyprus (CY), Czech Republic (CZ), Denmark (DK), Estonia (EE), Finland (FI), France (FR), Hungary (HU), Ireland (IE), Italy (IT), Latvia (LV), Netherlands (NL), Poland (PL), Portugal (PT), Slovakia (SK), Slovenia (SI), Spain (ES), Sweden (SE) and the United Kingdom.

Data makes up a representative sample of the total population, but in this case we have restricted our sample to young people 16-30 years old who have left the educational system prior to 2005-2006, i.e. the first wave of the longitudinal survey 2007 and 2008. The EU-SILC panel data follows a four year cycle, which means that every individual is followed for four years and that every year a forth of the sample is replaced by a new panel section. An effect of this system is that the fewer years we are using, the larger sample we get. In order to have sufficient sample we decided to use a three-year panel. In a first step we have selected those who participated during 2006-2008. In order to further boast the sample size we have also added the sample section that participated during 2005-2007. The total survey size is 152994 and the young group is 20 909.

3.1.2. Typology of trajectories

At the individual level, school-to work transition denotes a time-dependent process whereby an individual moves from an initial state to a final presumably desirable state via a number of transitory intermediate states.

For every month nine alternatives are offered. (1) Employee full time; (2) Employee part time; (3) Self-employed full time; (4) Self employed part-time; (5) Unemployed; (6) Retired; (7) Student; (8) Other Inactive; (9) Compulsory military service. Thus, all individuals included in our sample have 36 consecutive monthly measurements of main activity. According to Hallerod and Ekbrand (2012), this monthly information is used to derive clusters of specific labour market trajectories. The lifecourse is derived from 7 main activity positions gathered every month for each interview respondent to build an empirical typology of the transitions:

(1) Employee full time; (2) Employee part time; (3) Self-employed (4) Unemployed; (5) Retired; (6) Student; (7) Other Inactive.

3.1.3. What are the dominating labour market trajectories?

One might imagine that after at least years on the labour market, young people have finished with school-to-work transition and started forging a career. However, in Europe, school-to-work transition is far from being immediately achieved. Table 1 displays the trajectories of young entrants on the labour market which are clustered into six different patterns. It shows that the passage the passage between school-to work transition and starting a career can follow many different patterns over the three-year period.

Full-time continuous employment trajectory: 37%

This first cluster has been full-time employed for 36 consecutive months. Following three years of school-to work transition, while it can be said that full-time employment trajectory is the dominating labour trajectory, it however only consists of around 37 percent of the workforce entrants. The path to continuous employment is not yet at an end for two-thirds of the entrant workforce.

Discontinuous employment pathway: 31%

The second cluster includes young entrants aged between 16 and 30 whose the labour market pathway is characterised by experiences of discontinuity due to job shifts and unemployment. Occupational situations changed and people moved from one employment to another. One third of the entrant workforce follows this kind of trajectory.

Unemployment trajectory: *12,5%*

The third group, corresponds to young adults who have been over the three years followed, recurrently or persistently unemployed. It includes 12,5% of the sample of young entrants aged between 16 and 30.

Inactivity trajectory: *9,5%*

The fifth trajectory is characterised by about 10% of young entrants aged between 16 and 30 whose over the three years followed had withdrawn from the labour market;

Unemployment/ inactivity followed by employment full time trajectory: 6%

The analysis of the trajectories recorded show that people could find a job after a long period of unemployment. Over 3 percent are in this situation.

Employment period followed by an unemployment trajectory: 3%

The analysis of the trajectories recorded show that people could find themselves out of work after an initial period of full-time employment. Over 3 percent are in this situation.

3.1.4. Great diversity of trajectories, which depended on the level of education

However, this overall pattern masks the great diversity of individual trajectories, which depended in particular on the level of education and vocational training achieved. At the one end of the scale, young entering the labour market with no or few formal qualifications (ISCED levels 0-2), are twice as likely to be in an unemployment trajectory and around 20 percent were persistently unemployed. In addition, 15 percent of young people less than thirty years had withdrawn from the labour market without going back to school. Only one quarter of them has followed a full-time continuous employment trajectory. The remainder, who formed the relative majority managed to stay in employment by moving from an employment to another: 28 percent of young entrants whose ISCED level is (0, 1,2) has followed this kind of trajectory. This description of young's people first years on the labour market therefore confirms that some trajectories are as not often a unique matter of choice.

Table 1: Clusters of LMT among people who have left the educational system prior to 2005-2006

%			
	[16-30] ISCED level =0,1,2	**[16-30] ISCED level > 2**	**[16-30] Total**
1. Full –time employment trajectory	26,13	40,91	37,25
2. Employment followed by unemployment trajectory	3,59	3,12	3,23
3. Unstable employment trajectory	27,42	31,66	30,61
4. Inactive trajectory	14,88	7,40	9,25
5. Unemployment/ inactivity followed by employment full time trajectory	6,35	5,74	5,89
8. Unemployment trajectory	19,87	9,85	12,33
Missing	1,74	1,33	1,43
Total	100,0	100,0	**100.0**
Frequency (avec missing)	**5183**	**15726**	**20 909**

Source EU-SILC longitudinal 2005-2007 and 2006-2008– Europe (excluding Norway and Greece)
Scope: [16-30] who have left the educational system prior to 2005-2006

4. What factors affect the capability for work?

Does the ALMP spending matter in terms of its impacts on labour market outcomes? How large are its effects on the various trajectories identified? Does it secure professional pathways? What other factors affect the capability for work? This section provides an empirical analysis to answer these issues.

The line of enquiry concerns thus personal, social and environmental circumstances (i.e. the conversion factors) that enable young people to control their mobility. What factors guarantee professional security, or, contrarily, generate career fragmentation? Such conversion factors are found at various levels. Among the personal conversion factors, there is the issue of level education (initial and continuing vocational training, residential autonomy, the situation of etc.). Conversion factors also include social and environmental conversion factors derived from public policy (employment incentives, social expenditure on labour market policies, the quantity of available job, the young unemployment rate, the educational system, the early school rate, etc.). To what extent do these conversion factors open up areas of freedom, or do they, on the contrary, constraint individual work opportunities? We will attempt here to shed light on how the various factors involved in shaping young entrants interact.

The perspective outlined above supposes, on the one hand, to include into the EU-SILC database national information related to environmental conversion factors alongside with the individual ones. For this purpose, the ALM database from Eurostat (Eurostat, 2010) is first used to complement EU-SILC database and integrate Active Labour spending of each countries. Besides, the national unemployment rate (Eurostat 2009) and early school leaver rate published by Eurostat is also included as additional information of EU-SILC. Second it entails adopting econometric models that would allow disentangling individual and environmental conversion factor which influence the various trajectories identified in the previous section. This will require the use of multilevel models (Snijders 1999, Bressoux 2008). Multilevel models are used to specify the effect of social context and explore the link between the macro and micro levels of social phenomena. The analysis is based on the assumption that people are nested within countries and the analysis provides fixed effects that are assumed to be homogeneous across countries and random effects capturing differences between countries.

The results discussed in the following sections stem from seven multilevel logit listed in Annex. The models uncover the relationship between the key variables of interests – the six labour market trajectories – and the conversion factors that may influence these variables. The issue of individual conversion factors relates to the sexe variable, the level of education, the residential autonomy and the situation of parents (when applicable). Social conversion factors comprise ALMP expenditures, youth unemployment rate and ESL rate.

4.1. Do Active Labour Market Expenditures affect the capability for work?

Using multilevel modeling, the paper highlights that there is a lack of evidence that ALMP measures are effective in achieving their goal of inserting people into a sustainable path of employment quality. First, the result emphasize that ALMP spending are effective enhancing *discontinuous employment pathway*, when decreasing *inactivity pathway.* However this is to the detriment of positive effect on *full-time continuous employment trajectory.* Indeed, as a matter of fact, ALM expenditures are associated with a lower probability of being in a full-time employment trajectory. Second, ALM expenditures are expected to help unemployed workers return into employment more quickly. However, the effects are non significant in practice on youth long term unemployed facing particular problems. Hence, the overall cost effectiveness of such measures is ambiguous and not substantiated. The claims made for the beneficial effects of raising employment rate out to be right while the effect on raising the capability for work with a dynamic view of this phenomenon is not substantiated.

4.2. The crucial role of the young unemployment rate

Among the social conversion factors, it is not surprising to highlight that young unemployment rate matter greatly for labour market outcomes. It tends to increase the flows between employment and unemployment and amplify the young's chances of being an unemployment trajectory while.

4.3. Early School leaving matters

A key lesson is that the early school rate matter greatly for labour market outcomes of young aged 16-30. The results shed light on the fact that the higher early school leavers rate the higher is the probability of young 16-30 years old to follow a full-time employment trajectory over the three years. A high early school leaving rate often goes hand in hand with a more secure situation for the majority of young people who remain non early school leavers. This specific aspect can not be taking into consideration in isolation In addition, the analysis showed that a low level of education has a statistically significant effect on labour market outcomes. It must be stated though that the it decreases the capability to be in a continuous full-time employment pathway.

4.4. Being a man has positive effect

Looking at individual conversion factors, it becomes apparent that there are differentials by gender. The empirical results found that being a younger man has a key effect in the probability of being in a full time employment trajectories while younger women are more likely to be in an employment or inactive trajectory situation.

5. Conclusion

This chapter investigates in Europe the effects of active labour market spending through the lens of the capability approach. On average, we find only small effects, if any on the capability for work. The overall cost effectiveness of such measures is ambiguous. Using multilevel modeling, the paper highlights that while ALMPs may increase employment rates for targeted groups, this may be to the detriment of the capability for work. It is argued that the claims made for the beneficial effects of raising the employment rate turn out to be right while the effect on raising the capability for work with a dynamic view of this phenomenon is not substantiated; the effects are often relatively poor in practice as there is a is a lack of evidence that they are effective in achieving their goal of inserting people into a sustainable path of employment quality. However, the identification of obstacles that may impede the ambition of active labour market spending would require a more comprehensive view that

this microeconometric approach studies does not capture and call for an investigation that would put at the core of the analysis the freedom aspect of the capability for work.

Table 2 - Multilevel models - Probability of being in a full time employment trajectory over 3 years

	Logit Model 1	Contextual Logit Model 2	Multilevel Logit Model 3
Fixed Effects			
Intercept	-1.0313***	- 0.9733 ***	- 1.2645***
INDIVIDUAL VARIABLES			
Sexe (Man)	0.9074***	0.9228***	0.9349***
ISCED = (0, 1,2)	-0.7492***	- 0.7946***	-0.8018***
Residential autonomy	0.3025***	0.2907***	0.1529***
No residential autonomy when one or both is working	0.0518(ns)	- 0.0087 (ns)	0.1126 (ns)
No residential autonomy when neither parent is working	*Ref.*	*Ref.*	*Ref.*
COUNTRY VARIABLES			
ALM expenditures (cat 2-7)		- 0.5218 ***	- 0.4853*
Youth Unemployment Rate		- 0.0374***	- 0.0278*
ESL rate		0.016***	0.0177*
Random Effects			
Intercept			0.1185***

Source EU-SILC longitudinal 2005-2007 and 2006-2008– Europe (excluding Norway and Greece)
Scope: [16-30] who have left the educational system prior to 2005-2006

Table 3 - Multilevel models - Probability of being in an unemployment trajectory over 3 years

	Logit Model 1	Contextual Logit Model 2	Multilevel Logit Model 3
Fixed Effects			
Intercept	- 1.5028***	- 1.8385***	- 1.2906***
INDIVIDUAL VARIABLES			
Sexe (Man)	- 0.4788***	- 0.4721***	- 0.4666***
ISCED = (0, 1,2)	0.8131***	0.8509***	0.8107***
Residential autonomy	- 0.7930***	- 0.7038***	-0.3344***
No residential autonomy when one or both is working	- 0.2120***	- 0.1160**	-0.4409***
No residential autonomy when neither parent is working	*Ref.*	*Ref.*	*Ref.*
COUNTRY VARIABLES			
ALM expenditures (cat 2-7)		0.1561 (ns)	-0.00046 (ns)
Youth Unemployment Rate		0.1020***	0.08605***
ESL rate		- 0.02395***	-0.01862 *
Random Effects			
Intercept			0.09849**

Source EU-SILC longitudinal 2005-2007 and 2006-2008– Europe (excluding Norway and Greece)
Scope: [16-30] who have left the educational system prior to 2005-2006

Table 4 -Multilevel models - Probability of being in an unstable employment trajectory over 3 years

	Logit Model 1	Contextual Logit Model 2	Multilevel Logit Model 3
Fixed Effects			
Intercept	- 0.9094***	- 0.8523***	- 0.9019***
INDIVIDUAL VARIABLES			
Sexe (Man)	- 0.0405(ns)	- 0.04097 (ns)	- 0.04226 (ns)
ISCED = (0, 1,2)	- 0.1896***	- 0.3064***	- 0.2851***
Residential autonomy	0.1944***	0.1490***	0.04728*
No residential autonomy when one or both is working	0.1587	0.1943***	0.2572***
No residential autonomy when neither parent is working	*Ref.*	*Ref.*	*Ref.*
COUNTRY VARIABLES			
ALM expenditures (cat 2-7)		0.8736 ***	0.9512 ***
Youth Unemployment Rate		- 0.00720 **	- 0.01012 (ns)
ESL rate		0.01561 ***	0.008962 (ns)
Random Effects			
Intercept			0.1279 ***

Source EU-SILC longitudinal 2005-2007 and 2006-2008– Europe (excluding Norway and Greece)
Scope: [16-30] who have left the educational system prior to 2005-2006

Table 5 -Multilevel models - Probability of being in an inactive trajectory over 3 years

	Logit **Model 1**	**Contextual Logit** **Model 2**	**Multilevel Logit** **Model 3**
Fixed Effects			
Intercept	- 2.0630***	- 2.1154***	- 2.3390***
INDIVIDUAL VARIABLES			
Sexe (Man)	- 1.5972***	- 1.6339***	- 1.6544***
ISCED = (0, 1,2)	0.9734***	1.2198***	1.2022***
Residential autonomy	0.1852**	0.1913**	0.07837**
No residential autonomy when one or both is working	- 0.2286***	- 0.2807***	- 0.2052 (ns)
No residential autonomy when neither parent is working	*Ref.*	*Ref.*	*Ref.*
COUNTRY VARIABLES			
ALM expenditures (cat 2-7)		- 0.8257***	- 0.9783***
Youth Unemployment Rate		- 0.01724***	0.001962 (ns)
ESL rate		- 0.03140***	- 0.02987**
Random Effects			
Intercept			0.1428**

Source EU-SILC longitudinal 2005-2007 and 2006-2008– Europe (excluding Norway and Greece)
Scope: [16-30] who have left the educational system prior to 2005-2006

Table 6 - Multilevel model - Probability of being in unemployment, inactivity followed by an employment full time trajectory

	Logit Model 1	Contextual Logit Model 2	Multilevel Logit Model 3
Fixed Effects			
Intercept	-3.2168***	-3.2186 ***	-3.4094 ***
INDIVIDUAL VARIABLES			
Sexe (Man)	-0.7954***	-0.7920 ***	-0.8011 ***
ISCED = (0, 1,2)	0.2275**	0.1886 **	0.1815 *
Residential autonomy	0.1807 (ns)	0.1890 (ns)	0.07561 (ns)
No residential autonomy when one or both is working	-0.0594 (ns)	-0.07671 (ns)	-0.00911 (ns)
No residential autonomy when neither parent is working	*Ref.*	*Ref.*	*Ref.*
COUNTRY VARIABLES			
ALM expenditures (cat 2-7)		-0.3027 *	-0.4286 (ns)
Youth Unemployment Rate		-0.00849 (ns)	0.004423 (ns)
ESL rate		0.009757 (ns)	0.01023 (ns)
Random Effects			0.1473 **
Intercept			

Source EU-SILC longitudinal 2005-2007 and 2006-2008– Europe (excluding Norway and Greece)
Scope: [16-30] who have left the educational system prior to 2005-2006

Table 7 -Multilevel model - Probability of being in employment followed by an unemployment/inactive trajectory

	Logit Model 1	Contextual Logit Model 2	Multilevel Logit Model 3
Fixed Effects			
Intercept	-2.6136***	-2.7065***	-2.6436 ***
INDIVIDUAL VARIABLES			
Sexe (Man)	-0.0619(ns)	-0.06254(ns)	-0.07353(ns)
ISCED = (0, 1,2)	0.0821(ns)	0.1655**	0.1148 (ns)
Residential autonomy	-0.3304***	-0.2872***	-0.09855 **
No residential autonomy when one or both parent is working	0.0898(ns)	0.08573(ns)	0.005174(ns)
No residential autonomy when neither parent is working	*Ref.*	*Ref.*	*Ref.*
COUNTRY VARIABLES			
ALM expenditures (cat 2-7)		-0.5161***	-0.6402*
Youth Unemployment Rate		0.01850**	0.02722(ns)
ESL rate		-0.01417 ***	-0.01030 ns)
Random Effects			
Intercept			0.1495**

Source EU-SILC longitudinal 2005-2007 and 2006-2008– Europe (excluding Norway and Greece)
Scope: [16-30] who have left the educational system prior to 2005-2006

Inset 1 - Eurostat Labour Market Policy (LMP)

LMP statistics are an important source of data for monitoring the European Employment Strategy (EES) which advocates active and preventive labour market measures.

Labour market interventions can be described as *"Public interventions in the labour market aimed at reaching its efficient functioning and correcting disequilibria and which can be distinguished from other general employment policy interventions in that they act selectively to favour particular groups in the labour market"*.

Public interventions refer to actions taken by general government in this respect, which involve expenditure, either in the form of actual disbursements or of foregone revenue (reductions in taxes, social contributions or other charges normally payable).

The scope of LMP statistics is limited to interventions that are explicitly targeted at groups of persons with difficulties in the labour market: the unemployed, persons employed but at risk of involuntary job loss and persons currently considered as inactive persons but who would like to enter the labour market. The unit of observation is the labour market intervention and data on the expenditure and participants for each intervention are collected annually from administrative sources in each country. In addition extensive qualitative information describing the details of each intervention is collected. LMP interventions are grouped into three main types – LMP services, LMP measures and LMP supports –and then further classified into nine detailed categories according to the type of action.

Category 1: Labour market services:

LMP services cover all services and activities of the Public Employment Services (PES) together with any other publicly funded services for jobseekers. LMP services cover all services and activities of the

Public Employment Services (PES) together with any other publicly funded services for jobseekers.

Services include the provision of information and guidance about jobs, training and other opportunities

that are available and advice on how to get a job (e.g. assistance with preparing CVs, interview techniques, etc.

LMP measures cover interventions that provide temporary support for groups that are disadvantaged in the labour market and which aim at 'activating' the unemployed, i.e. they require participants to take part in some activity, in addition to or instead of their regular job-search, that aims to broaden their skills or experience of work and therefore improve their chance of finding a regular job in future. Measures can also aim at helping people move from involuntary inactivity into employment or to maintaining the jobs of persons threatened by unemployment.

Category 2: Training

Category 3: Job rotation and job sharing

Category 4: Employment incentives

Category 5: Supported employment and rehabilitation

Category 6: Direct job creation

Category 7: Start-up incentives

LMP supports cover financial assistance that aims to compensate individuals for loss of wage or salary and support them during job-search (i.e. mostly unemployment benefits) or which facilitates early retirement.

Category 8: Out-of-work income maintenance and support

Category 9: Early retirement

Source: Eurostat (2010) abour Market Policy – expenditure and participants

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