



Scarring effects of the crisis

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Abstract

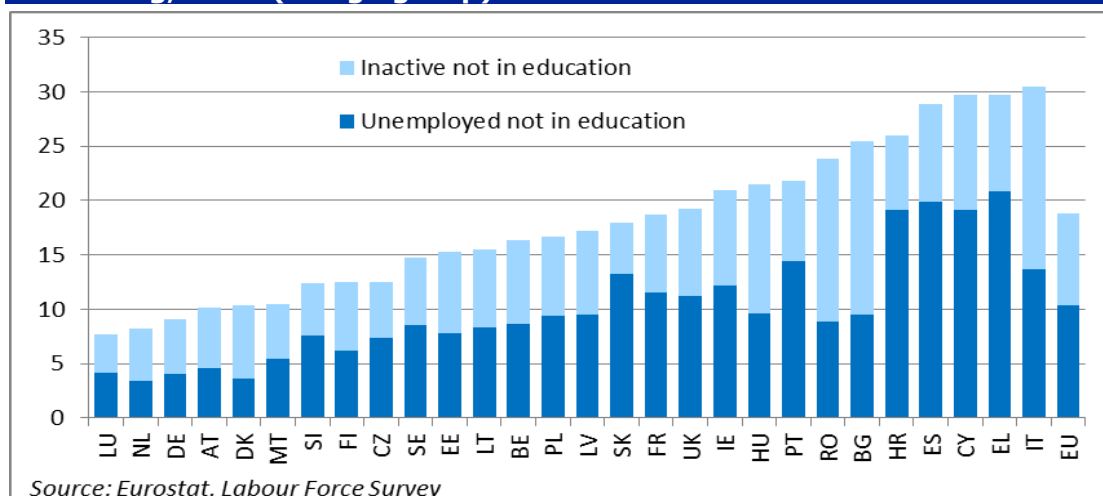
This research note presents a review of the literature analysing the damaging effects of the crisis on individuals, in particular, on their working careers and future life chances, and ultimately on the future growth prospects of the EU economy. It shows that the economic crisis has potentially scarring effects in these terms on young people especially. Even if many of them are likely to be able to catch-up and avoid their experience having long-term detrimental effects, it will, nevertheless, tend to increase the risk of social exclusion and health problems for some of them and oblige them to adopt coping strategies in the face of limited employment opportunities. There is very little literature on the damaging effects of the crisis on economic growth simply because of the difficulties of analysing the links between current events and developments over the next 10-20 years when any adverse consequences for labour productivity are likely to be felt. Given that it is very difficult to identify the relative importance of the various factors underlying productivity growth in the long-term, it is only to be expected that distinguishing the effect of an event like the present crisis would prove problematic. The crisis, however, can potentially have positive effects as well, in the form in particular of encouraging a deeper consideration of strategies for both minimising the damage to individuals, especially the young, and stimulating economic growth so that it is sustained over the long-term. Investment in education is at the root of such strategies and the note ends with a review of what has happened to expenditure on education across the EU over the crisis period.

Introduction

The economic crisis has resulted in large scale job losses and a marked decline in the rate of new job creation in most parts of the EU, giving rise to a substantial reduction in employment rates and a sharp increase in unemployment. The average rate of unemployment in the EU as a whole rose dramatically from 7% in 2008 to almost 11% in 2013, with rates increasing to 26-27% in Spain and Greece and to 16-17% in Croatia, Portugal and Cyprus.

Young people have been particularly affected. Of the total of the 25.9 million people unemployed in the EU in 2013, 5.2 million were aged 18-24. An age group which made up just 13% of the total of working age (defined here as 18-64), therefore, accounted for 20% of the total unemployed. Rates of unemployed among this age group were as high as 50% in Croatia, 55% in Spain and 58% in Greece and were only slightly less than 40% in Portugal, Italy and Cyprus. These rates, however, overstate the scale of the unemployment problem among young people to the extent that they cover only those young people who have entered the labour market and are looking for work. They, therefore, leave out of account the many of those in this age group who are still in the education system and who are either students or receiving vocational training. Nevertheless, even if explicit allowance is made for these, it is still the case that a substantial proportion of young people aged 18-24 were neither employed nor in education or training (what have come to be known as NEETs), the figure reaching 19% in the EU in 2013. While the majority of these were unemployed (just over 10% of the age group), 45% were inactive, in the sense of being out of work and not actively seeking employment and not in education or training (Figure 1).

Figure 1 Proportion of those aged 18-24 not in employment nor in education or training, 2013 (% age group)

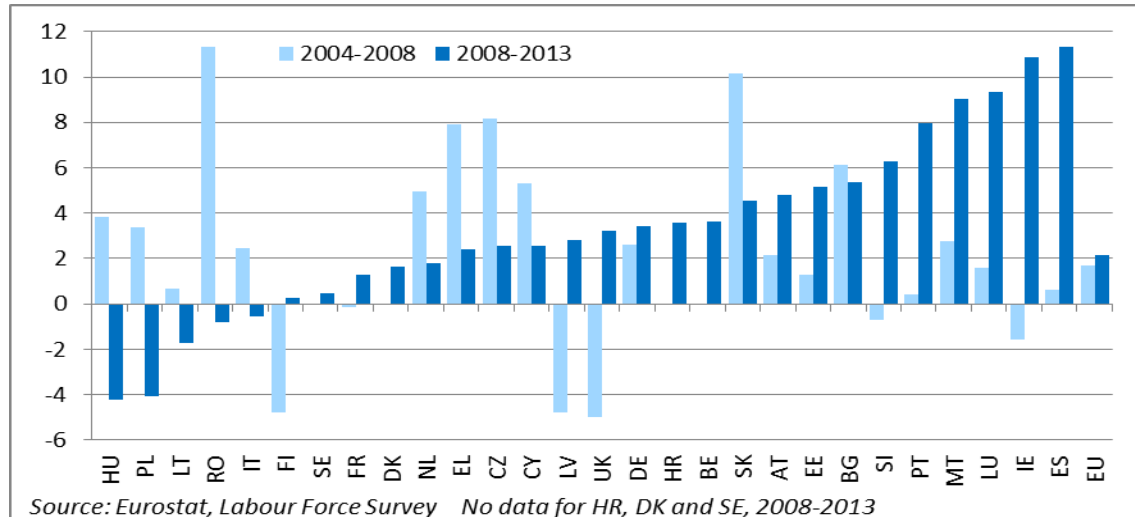


The largest numbers of NEETs in relation to the population in the age group were in the main in the same countries in which unemployment rates were highest – i.e. in the southern EU countries – though the rank order is altered slightly, with the proportion in Italy exceeding that in Greece, Spain and Cyprus as a result of the large number of young people not economically active and not in education or training either (17% of the age group). The figures were only slightly smaller in Romania and Bulgaria (15-16% of those aged 18-24), pushing the proportions up to around 25% of the age group and above those in Portugal.

While the relative number of young people who can be categorised as NEETs has increased over the crisis period, it is also the case that the proportion in education or training has risen among the economically inactive as well, as employment rates have fallen and job opportunities have dried up. There is evidence in many countries, therefore, especially in those where employment rates have declined by most, of

young people postponing entering the labour market and remaining in the education system longer because of this. The evidence, however, is largely confined to the EU15 countries, especially if the long-term upward trend apparent in most countries before the onset of the recession in 2008 is taken into account. In the EU as a whole, the proportion of those aged 18-24 in education or training (and not economically active) increased between 2008 and 2013 by around 2 percentage points but this was similar to the rate of increase over the preceding four years (Figure 2).

Figure 2 Proportion of those aged 18-24 economically inactive and in education or training, 2004-2013 (Percentage point change)



Nevertheless, in Spain, Ireland, Portugal and Slovenia, in particular, where employment among young people declined markedly over the crisis period, the proportion in education or training went up significantly whereas it had risen only slightly or had fallen in the years before the crisis. This was also the case in Latvia and the UK and to a lesser extent in Estonia, all countries where the employment rate of young people declined by more than average over the period 2008-2013, though it was equally the case in Luxembourg, Malta, Austria and Belgium where the employment rate fell by less than average.

On the other hand, in most of the EU13 countries, the proportion of those aged 18-24 either declined over the crisis period (as in Hungary, Poland, Lithuania and Romania) or rose at a slower rate than before (as in the Czech Republic, Cyprus, Slovakia and Bulgaria). Moreover, in Greece and Italy, countries where employment opportunities for young people shrank considerably over the years 2008-2013, the proportion in education either rose less than before or declined, though these were the only countries in the EU15 apart from the Netherlands where this was the case.

In Greece and Italy as well as in the EU13 countries, it may, therefore, be that the option of remaining in the education system was more limited than in the most of the EU15 Member States or, alternatively, that young people preferred to try to find employment despite the labour market situation, driven perhaps by a squeeze on household income as a result of the crisis. Whatever the reason, it meant that the change in the trend of young people going into education or training tended to push up the unemployment rate and the number of people looking for a job.

How far, on the other hand, remaining in education or training was beneficial for the young people concerned is uncertain. Much depends, of course, on what programmes or courses they undertook and to what extent they enabled them to acquire skills and competences which are likely to be in demand in the labour market in the coming years. It also depends on whether employers view the additional time spent in education or initial vocational training positively or negatively, though the alternative might have been a lengthy spell of unemployment which employers are likely to regard even less favourably. Whatever the reality, it means that the young people concerned are likely to be competing with a larger number of people when they do decide to enter the labour market, many of them younger than them.

In sum, therefore, young people with the misfortune of completing their education – or reaching an age when they would normally leave the education system – during the crisis period are likely in many cases to have had to endure a lengthy spell of unemployment or spent a longer period in education or training before finding employment. Moreover, the positions they do manage to find, given the competition on the job market, might well involve a lower rate of pay and less favourable career prospects than they could normally expect in less adverse circumstances.

The issue considered here is the longer-term consequences for the young people in this situation as well as for the economy. As intimated above, these consequences, and indeed whether they are likely to occur or not, are difficult to be sure about. The only evidence that is relevant relates to the results of analysing the effects on young people who entered the labour market in similar circumstances in the past. The difficulty is, first, that the circumstances in question need to have happened sufficiently long in the past that the long-term consequences, preferably over the working lives of the people concerned, in terms of the jobs they had and the wages they earned, can be observed.

Secondly, the people concerned need to be followed over a large number of years, which means that there is really a need for longitudinal or panel data to make this possible.

Thirdly, their actual employment history and earnings record needs to be compared with their employment situation, with the jobs which they otherwise would have had if the labour market conditions had been different and with the income they would have earned. This ideally means having a control group with similar characteristics that entered the labour market in more favourable times, or possibly that entered at the same time but managed to find employment without a spell – or at least a prolonged spell – of unemployment which can serve as a point of comparison. (The potential difficulty of using contemporaries who were less affected by the situation as a control group is the very fact that they were less affected implies that they did not possess exactly the same characteristics as those who experienced problems in finding employment, otherwise they would have been affected too.)

The difficulty is that longitudinal data are scarce, particularly those which span two or three decades, or even more, to enable the working lives of the individuals affected, and the control group, to be monitored. Moreover, even if the data required were available for the past few decades, there is no equivalent set of circumstances which is really comparable with those of the period since 2008, or at least not within the past 75 years or so. (The only comparable period for most countries is the 1930s but there are no suitable data for examining the career profiles of the people affected at the time.)

Faced with these difficulties, the studies which have been carried out of the potential damaging effects of the crisis period on young people over the long-term have for the most part been forced to assume that the experience of young people in past (more recent) periods of economic downturns is indicative of how they will be affected by being unable to find employment over the more recent past. In a number of cases, they have also constructed datasets, usually based on cohort data from surveys, to serve as a proxy for longitudinal data given the non-availability of the latter. Although there is not much alternative to both given the concern to throw some light on the possible consequences of the lack of job opportunities for young people, it means that any conclusions are inevitably subject to a significant degree of uncertainty.

If, on the one hand, young people who have been forced to undergo a prolonged spell of unemployment in the past are found to suffer long-term effects in respect of their future career prospects, earnings and life chances generally, then it can probably be concluded that these effects are likely in the present crisis to be even more pronounced because of the scale of the downturn and the length of the period of recession or stagnation. On the other hand, however, if no significant long-term adverse effects are found, it cannot necessarily be concluded, because of its different length and scale, that the present crisis will also have no long-term effect.

The findings from analysis of the long-term effects of the crisis on young people are relevant for assessing the wider effects on the economy in future years of the potential loss of knowledge and skills from a significant number of them not being employed for a long period of time. Indeed, being able to identify the former effects is in many ways a necessary condition for identifying the latter. As noted above, however, there is the additional problem of distinguishing the effects of the potential loss concerned on the growth of the economy from among the many other factors influencing this, especially since there is no certainty that the economy is likely to grow at its potential rate – which is what is affected by a loss of productivity among the work force – which depends on achieving a higher level of employment than has usually proved possible over the past 30-40 years.

At the same time, as well as generating scarring effects, an economic crisis can also prompt a fundamental rethink about economic strategy in future years and of ways of both getting out of the crisis and of avoiding, or at least reducing, the chances of a repetition and, accordingly, of sustaining growth over the long-term. There is evidence, therefore, that the severe recession in Sweden in the early 1990s caused such a rethink and the emphasis was put on strengthening the education of young people as a means of laying the foundations for a stronger, knowledge-based economy. The rethink is reviewed below as well, along with an examination of the way that expenditure on education has changed over the crisis period, during a time when, as noted above, there has been a widespread tendency for young people to remain longer in education before trying to find a job.

Outline

The first section below summarises the studies which have been carried out on the effects of the economic crisis on the working lives of young people in terms of their future careers and levels of earnings, and, in particular, on the impact which entering the labour market during a period of recession and job scarcity has whether this is temporary or more persistent. The focus is on the research carried out on first-time job seekers, though, of course, those already in the labour market who have lost their job because of the economic downturn and are unable to find a new one may also experience similar effects.

The second section summarises the literature on the effects of the crisis on the risk of poverty and social exclusion of young people over the long-term, as well as on their health, aspects which are closely linked to their employment situation. The studies carried out on the strategies adopted by young people to cope with unfavourable labour market conditions and low income are also examined because they could have a lasting effect on young people and the life choices open to them.

The third section considers the literature which exists on the possible effects of the crisis on future growth prospects as a result the depletion of human capital caused by young people having to spend a prolonged period without work instead of being able to refine and extend the knowledge and skills they acquired from education and initial training by working.

1. Damaging effects of the crisis on working lives

Evidence from the literature suggests that scarring is a real phenomenon, in the sense that experiencing unemployment at some point in a person's life, most especially at the beginning of a working career, tends to increase the probability of them being unemployed in the future and having lower prospective earnings than they otherwise would have.

Entry into the labour market during an economic downturn

A number of studies which have been carried out suggest that a long spell of unemployment at the start of a working career tends to have long-term adverse

effects on future employment prospects as well as future earnings. The evidence for the UK and the US indicates that young people are particularly likely to suffer damaging effects from a lengthy spell of unemployment well after the event (Bell and Blanchflower (2010)) and that this initial experience is found in Germany, Sweden, the Netherlands and Italy as well as the UK to have a significant effect on their subsequent careers (Barone and Schizzerotto (2011)). Two studies, covering Europe and the US, also show that such long-term effects are specific to young people in the early stages of their working life and are not evident for people experiencing unemployment later in their life (Bell and Blanchflower (2011a); Blanchflower and Oswald (2011))¹.

Youth is a crucial period when people gain independence and, therefore, tend to be more vulnerable to external events and the situation in the labour market in particular. Giuliano and Spilimbergo (2009) suggest from a study of young people in the US that the period of early adulthood (between the ages of 18 and 25) is the age during which people are more sensitive to macroeconomic conditions. They find that being exposed to a recession before the age of 17 or after the age 25 of has little effect on a person's beliefs about their life chances, but that young people growing up during periods of economic downturn are more likely to be pessimistic about their future lives than those growing up in more favourable circumstances. This is a particular concern since many young people in Europe under 25 were already in a vulnerable position in the labour market before 2008, especially those without adequate qualifications (with only basic schooling) whose employment prospects were limited (Taylor-Gooby (2004)) and whose prospects have deteriorated further since the onset of the crisis.

It is also the case that the time taken for young people to make the transition from education into work varies markedly between EU Member States and did so even before the crisis hit in 2008. In Greece, therefore, over 60% of young people leaving the education system took more than a year to find employment in the years preceding the crisis and over a third took more than three years. In Italy and Spain, the situation was only slightly better, with over half of young people taking over a year to find their first job in the former and over 45% in the latter².

Further evidence on the disadvantages of entering the labour market during a recession, at least in Sweden, is provided by a study by Kwon et al. (2010) using matched data for employers employees, who find that a cohort of young people entering the labour market during a period of economic growth get promoted faster and reach higher career levels than those entering in less favourable times.

This result is in line with the findings of a study by Kahn (2010), though for the US rather than Europe, using data from the National Longitudinal Survey, which indicates that graduating from college or university during a recession has large and persistent negative effects on wages. The young people concerned, therefore, were found to have substantially lower lifetime earnings than those entering the labour market in better times. Similar findings were also indicated by a study of new entrants to the labour market in the US and Japan (Genda et al. (2010)), at least for the better-educated among them, though the effects were stronger in Japan than in the US, whereas for the less well educated, the adverse effects tended to be temporary in the US but more permanent in Japan.

Effects on careers and wages: temporary or persistent?

Unemployment for a prolonged period has been found to reduce the probability of people finding stable jobs in a number of countries. In Belgium, for example, Cockx

¹ Focusing on weekly wages and happiness, the results from the first study show significant effects at the age of 50 from an early spell of unemployment but none from later spells, whereas the second study shows that youth unemployment lowers job satisfaction while unemployment in middle age does not.

² See 'First transitions from education into employment' European Commission (2012b), an analysis based on the European Labour Force Survey ad hoc module, 2009.

and Picchio (2011) find that if labour market entry of the young long-term unemployed is delayed by a year, the probability of finding a job in the following two years declines from 60% to 16% for men and from 47% to 13% for women. The issue of concern here, however, is whether these negative effects persist in the longer-term or whether instead they tend to be temporary and if the latter, how long it takes for the people affected to catch up in term of their likelihood of being employed and earning wages similar to those of young people not experiencing a lengthy spell of unemployment.

The studies undertaken on this issue, based on analysing cohort data (i.e. survey data for particular age groups compared as they get older rather than longitudinal data as such) come to slightly different conclusions depending on the country concerned. Studies of French and North American survey data find that, in general, 'disadvantaged cohorts' (those entering the labour market in times of relatively high unemployment) tend to 'catch up' relatively quickly with 'better advantaged' cohorts in terms of the probability of being employed. For the US, Genda et al. (2010), find that the catching-up process is completed within three years and for Canada, Oreopoulos et al. (2012), using matched university-employer-employee data for those graduating over the period 1982 to 1999, come to much the same conclusion. Similarly, Gaini et al. (2012) using French Labour Force Survey data for the cohorts entering the labour market between 1982 and 2009, find that those who completed their studies during a recession had lower employment rates and a larger proportion of them worked part-time and in temporary jobs, but that these tendencies lasted only for three years or so. After this period, their employment characteristics were, on average, not significantly different from those of cohorts entering the labour market during more favourable times.

Studies for other countries, however, find that a longer period is necessary for young people to catch up. For example, Gregg (2001) in a study of the UK finds that three months of unemployment when a person is young tends to lead to a high probability of being unemployed for at least a month 10 years later. In Sweden, Nordström Skans (2011) concludes young people graduating from vocational high schools in the recession years of 1991-94 had a higher risk of unemployment up to five years later. These results suggest that entering the labour market when jobs are scarce results in young people tending to have a higher risk of unemployment for some years after but not necessarily permanently.

At the same time, it could well be the case that in the far more unfavourable labour market conditions of the present crisis than in the previous periods of economic downturn which have been the basis for most studies, the catching-up process will tend to be longer for the age groups making the transition from education into work in the recent past than these studies have estimated (Cochard et al. (2010)). In addition, the chances of young people who are unemployed now could be negatively affected by them having a lengthy spell of unemployment if the latter is used as a screening device by employers when deciding on whom to take on. The young people concerned may, therefore, be at a disadvantage as compared with their peers who left education later and have had less time to be unemployed (Eriksson and Lagerström (2006)).

On the one hand, it has been argued, on the basis of the evidence from the German Socio-Economic Panel (SOEP), that being unemployed during an economic crisis, when a large number of people are out of work gives a less unfavourable impression to employers than being unemployed during a period of economic growth (Biewen and Steffes (2010)). There seems to be a broad consensus among the studies that have been undertaken, however, that lost work experience has a sizeable effect on the wages that young people can earn after being unemployed, implying that the latter carries with it a significant income penalty.

The size of the penalty and how long it lasts varies again between countries and in some cases between studies in the same country. For example, Nordström Skans (2004), finds that a spell of unemployment after completing vocational education tends to reduce annual earnings by an estimated 17% after 5 years in Sweden, while

Gregg and Tominey (2005) for the UK estimate that an early period unemployment lowers wages by between round 13 and 21% at the age of 42. They also estimate that the penalty is reduced (down to 9–11%) if the people concerned manage to avoid repeated spells of unemployment. Similarly, in Finland, Verho (2008) estimates that the penalty for being unemployed for any length of time amounts to 25% of annual earnings after six years.

Most of the studies suggest that it takes longer for young people experiencing unemployment to catch up in terms of wages than in terms of the likelihood of being employed. Nevertheless, there are differences between studies in the length of time the catching up process takes, though most of the studies concerned have been for North America and Japan and it is heroic to assume that the same results would be found for European countries. According to two studies, therefore, it takes around 10 years for the depressing effect of unemployment on earnings to disappear (Genda et al. (2010), for the US, Oreopoulos et al. (2012) for Canada), while others conclude that the effect is more persistent (Kahn (2010); Brunner and Kuhn (2010) and Mroz and Savage (2006) for the US and Genda et al. (2010) for Japan).

The adverse effects on wages, moreover, are not confined to the less well educated but apply to all young people irrespective of their education attainment levels (Kahn (2010), for the US and Oreopoulos et al. (2012) for Canada). There are apparent differences, however, between groups of individuals, the more fortunate ones among university graduates being able to find jobs with firms paying higher earnings relatively quickly, while less fortunate ones may be forced to work for low-paying employers more or less permanently (Oreopoulos et al. (2012))³.

Evidence from previous recessions and in particular those that happened in the 1990s in Sweden and Finland - which are to some extent similar to the current crisis - shows that the transition from education to work during an economic downturn is considerably delayed. In Sweden, for instance, the 'age of establishment', i.e. the age at which 75% of everyone born in a certain year has found employment, increased in the 1990s by five years for men and nine years for women (Palme (2002)). In addition, it is likely that the difficult entry into the labour market and the risk to be trapped in unemployment have damaging effects on wages and careers. The persistence of such effects is however debateable.

Role of education and the background of individuals

The current crisis gives rise to two new challenges so far as young people are concerned: a growing discouragement effect as some of them give up actively looking for a job because hardly any seem to be available and the emergence, in many countries, of unemployment among the well-educated of them instead of this being largely confined to those with lower education levels (ILO (2012)). Tertiary-level education and professional skills, however, still provide some protection against unemployment in that unemployment rates tend to be lower for the people concerned. Examining the labour market careers of young people that finished their studies in 1988, Hämäläinen (2003) finds, in Sweden, that university graduates largely escaped the damaging long-term effects of experiencing a spell of unemployment on entering the labour market, but these were the only group for which it was the case.

This finding is confirmed for Germany by Mosthaf (2014) who concludes, from an analysis of SOEP longitudinal data, that unemployment has a larger long-term effect on low-skilled workers than on those with upper secondary or tertiary education, as well as by Dolado et al. (2013) for Spain, who finds from an analysis of data from the Continuous Sample of Working Lives (*Muestra Continua de Vidas Laborales*) that an initial spell of unemployment has less damaging effects on high skilled workers than

³ Unlucky graduates suffer persistently lower earnings for 10 years or so. They start to work for lower paying employers, and then partly recover through a gradual process of mobility toward better firms. More advantaged graduates suffer less from graduating in recessions because they switch to better firms quickly, while earnings of less advantaged graduates can be permanently affected by cyclical downgrading.

on those with low skill levels. It is also confirmed by Scarpetta et al. (2010) from a survey of the evidence available for a number of European countries.

It is equally the case that young people from ethnic minority backgrounds with low education levels seem to be doubly affected, at least in the UK and the US (Bell and Blanchflower (2011b)), who argue that a part of the reason for this group experiencing higher levels of unemployment during the crisis is that many jobs requiring low skill levels have been taken by those with higher educational attainment. In other words, while the better educated are capable of doing low skilled jobs and may well take them up if no alternative ones are available, the low educated are not able to take up jobs demanding higher skill levels. On the other hand, a study for Sweden finds that despite the fact that migrants have a higher risk of unemployment than native-born Swedes, they seem to be no more vulnerable to becoming unemployed in the future if they experience an initial spell (Helgesson et al. (2014)).

2. Social impact of the crisis

Young people not only have to manage the transition from education to employment but also have to make the transition to independent living (Anxo et al. (2010)). The economic crisis and unfavourable employment prospects have made this more difficult.

Risk of social exclusion and health issues

The risk of poverty is increased by an economic crisis especially for young people (as in the case of those in Spain over the period after 2008 – Albert and Davia (2013)). Cuts in social welfare, or a tightening of the conditions for entitlement to support, which have occurred in many Member States, tend to aggravate the problems caused by unemployment and to further increase the risk of poverty and social exclusion among young people (according to studies by Gallie and Paugam (2000), for Europe and Mroz and Savage (2001) for the US for earlier periods of economic downturn) as well as of homelessness (FEANTSA (2013)) and poor physical health and heightened psychological distress (Rantakeisu (2002)).

The most vulnerable are the young people who are neither in employment nor education or training (what are known as NEETs). As indicated above, their relative numbers have risen significantly since 2008. Remaining unemployed or dropping out of the labour force completely for several years is positively associated with bad health and poverty, and over recent years, long-term unemployment or inactivity among young people has been more prevalent in Europe than in the US (Carcillo et al. (2014)).

NEETs have in many cases to rely on family support since the evidence shows that only a small minority of them across the EU receive social benefits or assistance. A large number of them are not entitled to social transfers since in most Member States welfare systems are based on the insurance principle, which requires them to have made social contributions for a minimum length of time before they are eligible for unemployment benefit. Moreover, those living with their parents are entitled to social assistance under minimum income schemes only if the combined income of the household – i.e. including that of their parents – falls below a certain level. As a consequence, according to a study of young people aged 15-20 in European countries, just 15% of NEETs across the EU receive benefits or assistance (Plantenga et al. (2013)).

There is an extensive literature from the 1980s and 1990s indicating that unemployment reduces life expectancy of those affected and increases their susceptibility to malnutrition, illness, mental stress, and loss of self-esteem which can lead to depression and suicide. More recent studies confirm these findings. In particular, a lengthy spell of unemployment combined with low income is found to have long-term detrimental consequences for the health – both mental and physical – longevity and life chances generally of the young people affected as well as their

participation in the labour force (Gangl (2006) for the US and Blanchflower (2010) for the US and Europe).

Blanchflower (2010) from a survey specially conducted in the UK at the end of 2009, finds that young people who were unemployed in many cases suffered rejection, depression and hopelessness leading some to feeling suicidal. These effects on mental health tend to persist over the long-term, even into the person's 40s, particularly if people suffer multiple spells of unemployment during their working careers, according to a study in Sweden (Strandh et al. (2014)), based on the 'Northern Swedish Cohort' (NSC) study of a panel of people at ages 16, 18, 21, 30 and 42.

As a result of the deep recession in Sweden in the 1990s, young people, and in particular young women, were noticeably more likely to experience unrest anxiety about their present predicament and fear about their the future leading to long-term mental problems (see Palme (2002)). While 6% of those aged 16-24 felt fear, unrest and anxiety at the beginning of the 1990s, this proportion had risen to 17% at the end of the decade. The relative number of 16-24 year-olds having long-term health problems also increased by 4 percentage points over the decade, reaching 28% in 1999, with 3% of the age group having long-term mental health problems in 1999 (2 percentage points more than in the early 1990). This reflects the fact that young people were particularly affected by the recession and faced continuing difficulties finding employment in the following years. Between 1990 and 1993, the unemployment rate of those under 25 rose rapidly to close to 20% and continued to rise up to 1997, when it stood at around 22%. While it then began to fall, the rate was still as high as 17.5% in 1999. The situation was particularly difficult for young men from working class background who were especially likely to become unemployed and to remain unemployed for longer than others, while at the same time being less likely than those people from other social classes to go on to further and higher education.

The effect of unemployment on people's health and well-being is not limited to those directly affected but extends to those whose partners are unemployed as well as to those who have returned to work after being unemployed, according to a recent study based on data from the European Social Survey (Russell et al. (2013)). The expectation, or fear, of becoming unemployed in the future seems to be a major factor affecting subjective well-being and happiness as much as the past experience according to a study based on the German SOEP longitudinal data (Knabe and Ratzel (2011)). The link between unemployment and well-being is confirmed by a recent report from Eurofound (2014) which found that young people who are unemployed or economically inactive and not in education or training are more likely than others to feel socially excluded and have poorer mental health. This is especially so for those with a spouse or partner living with their parents who in many cases cannot afford to set up home independently.

A more general recent study (Reeves et al. (2014)), which is not confined to young people as such, estimates, on the basis of relevant data for 24 European countries, that the number of suicides, which is a tangible, if unfortunate, outcome of depression and feelings of rejection, increased in 2009 by 6.5% over and above what would have been expected on past trends. This high level, moreover, persisted over the following two years in the countries concerned, implying that overall almost 8,000 more people committed suicide in the three years 2009-2011 than past trends would have suggested, many of which are likely to be attributable to the crisis.

Migration as a response to the economic crisis?

There is evidence that one response to the current economic crisis has been to migrate to a country or region where the labour market situation and employment prospects are more favourable. In a comparison of migration trends in Europe and the US before and after the onset of the crisis, an OECD study (Jauer et al. (2014)) found little evidence of increased inter-regional movements in the US after 2008, whereas there was evidence of increased flows between countries in Europe, especially from the southern Member States hit hardest by the crisis to more northern countries. This

was particularly so among the better educated young people. Between 2010 and 2011, therefore, the number of people moving from southern Europe increased by 45% on average, with a rise of 52% from Spain and 90% from Greece), a disproportionate number of the people involved having tertiary level education (European Commission (2012)). The implication is that such an exodus is likely to reduce the growth potential of the countries from which it has taken place in future years, as a result of the 'brain drain' it involves, unless, of course, there is a return movement while the people concerned are still able to make a significant contribution to the economy.

Lester (2012) explores the reasons underlying the recent outward movement of young well-educated Spaniards and argues that both 'push' and 'pull' factors are at work, with the attraction of more and better paid job opportunities in destination countries combining with a sense of disillusion about the situation in Spain and a lack of confidence about future prospects.

According to Jauer et al. (2014), the 'push factors' for more movement of young people out of the southern EU Member States are likely to remain strong in the coming years since the large differences in economic performance are tending to widen rather than narrow.

Cairns (2012), on the other hand, concludes that in the case of Ireland, the recent outward movement of tertiary-educated young people has tended to be more influenced by personal factors, such as the occupational background of parents and family relationships in encouraging, or discouraging, mobility than by purely economic considerations as such.

3. Impact on future growth prospects?

Nearly 6 years after the onset of the crisis, unemployment remains high in many countries and there is little sign of the number of young people out declining. Although there are signs of growth returning in most countries, the prospects for any quick recovery to levels of economic activity and employment experienced before 2008 seem remote. Against this background, there is a distinct risk that human capital will be significantly eroded and the potential growth of the EU economy could be reduced for a generation (European Commission (2013)).

This could potentially be mitigated by ensuring that young people, as well as those older, have access to education and training which improves their skills and capabilities so that they are better able to contribute to the growth of the economy when the recovery comes. For this to occur, however, requires investment in the education system and the provision of training programmes which are directed towards teaching the skills which will be in demand in the coming years.

Human capital and growth

As indicated above, there is little literature on the impact of the crisis on the potential output of the economy, mainly because of the difficulty of making any well-grounded estimate. Furceri and Mourougane (2009), however, attempted to assess the effects of previous financial crises in this regards based on macroeconomic data for OECD countries for the years 1960-2007. They estimated that such crises tended to lower potential output by between 1.5% and 2.4% on average and by nearly 4% in the case of a deep crisis. Oulton and Sebastián-Barriol (2013) conclude from an econometric analysis of macroeconomic data for 61 countries over the period 1955-2010 that for each year of a banking crisis, labour productivity tend to be reduced by 0.6-0.7% in the short-term and 0.8-1.1% in the long-term. They also estimate that capital per worker is reduced by an average of 1% over the long-term and that the effect on GDP per head is around twice the effect on labour productivity since the employment rate is also lowered.

The positive correlation between human capital and economic growth has been highlighted since the 1950s and is confirmed by more recent studies (Ciccone and

Papaioannou (2009); Ramos et al. (2009) and Arnold et al. (2011)). In the case of the EU, improvements in human capital are one of the main factors which are expected to contribute to the convergence of potential GDP in the EU13 economies towards the EU average in future years (Crespo Cuaresmaa et al. (2013)), while increasing the proportion of working-age population with upper secondary and tertiary education is regarded as being important to strengthen the economic performance in the long-run in southern EU Member States and narrowing the gap with the rest of the EU15 countries (Varga et al. (2013)).

These potentially beneficial effects, however, are put at risk by the high levels of youth unemployment, and more especially by the large numbers of young people who are long-term unemployed, which means a lack of on-the-job training, knowledge and skills which are depreciating and, accordingly, a work force which could be less productive as a result. In addition, cuts in public expenditure as part of fiscal consolidation measures aimed at reducing budget deficits and government debt levels, which are in large part a consequence of the crisis, are reducing investment in education in many countries. The effect is to limit the places available in vocational training programmes and universities and to adversely affect the quality of tuition, potentially adding to the damaging effects of young people not being able to find work.

Although relatively few studies have been undertaken, there is some evidence for Sweden of a negative relationship between spells of unemployment, or interruptions to employment, and skills and, accordingly, some support for the supposition that the skills of young people could be degraded as a result of the crisis. Using longitudinal data for 1994 and 1998 from the Swedish part of the International Adult Literacy Survey, which measured the ability of people to process information, Edin and Gustavsson (2008) analysed changes in the skills of the people surveyed in this regard between the two years. They estimated a year of non-employment had the effect of moving individuals down the skill distribution by 5 percentiles. Moreover, as noted above, since there is some tendency on the part of employers to regard unemployment as a sign of low productivity, there is a serious risk that young people will be trapped in unemployment (Eriksson and Lagerström (2006)), so reducing their potential productivity still further.

In the light of this, the Swedish Government was perceptive in launching a 5-year programme, (the Adult Education Initiative, in 1997, when youth unemployment was at its peak, to increase the access of the unemployed to education and training. The aim was to halve unemployment by 2000 by offering a year of full time studies to the unemployed who had not completed secondary education. The parallel goals were to reform education and labour market policy, increase the opportunity of those who had left school early to attain better qualifications and strengthen the growth potential of the economy. According to Stenberg (2003), the AEI reduced differences in both access to education and education performance across municipalities and the incidence of unemployment. It also benefited women more than men.

Finland experienced an even larger recession than Sweden at the beginning of the 1990s, GDP falling by 10% in the three years 1990-1993 and unemployment rising to over 15% as a consequence of the collapse of the Soviet Union coinciding with the global recession. This led to a major reconsideration of economic strategy with an increasing emphasis placed on technological advance and the development of a knowledge economy. It was recognised, however, that the need was not for investment in technological infrastructure or innovations but also in a well-educated work force. According to t Ylä-Anttila (2005), *'recent economic research has convincingly shown that ... education is strongly complementary to technological advancement. It is not possible to introduce new technologies without investing sufficiently in education at the same time'*. Strengthening education was, accordingly, given a central role in the overall strategy, the rationale being that *'it affects both supply of and demand for innovations. Human capital and skilled labour are instrumental in generation of new technologies, but demand side is equally important. New technologies are not demanded and adopted without sophisticated users. Finnish*

*education system emphasizes egalitarian values: equality by gender, region, and socioeconomic background. Equal opportunities for all, is the guiding principle. Everyone receives the same basic education, and education is free all the way up to the university level.*⁴

The result is that not only is R&D expenditure the highest in Europe relative to GDP, but Finland is top of the World Bank Knowledge Economy Index and the PISA index of the educational ability of students.

Over the crisis period, however, there is little sign of other EU Member States in general following the Finnish or Swedish examples. While, as shown at the outset, the relative number of young people staying longer in education has risen over the crisis period, expenditure on both education in total and tertiary education has fallen in many countries, especially in those where the crisis has hit hardest. In the EU27 as a whole, therefore (there are no figures for Croatia before 2012), education expenditure in real terms barely increased at all over the four years 2008-2012 (by less than 1%) after rising by 9% over the preceding four years (Table 1). In 14 of the 27 countries, it fell, including in Greece, Spain, Ireland and the three Baltic States where the effect of the crisis was particularly severe.

There was a less widespread decline in expenditure on tertiary education in real terms, though on average across the EU it fell by just under 3% between 2008 and 2012 as opposed to increasing by 22% over the previous four years and declined in 10 of the 25 countries for which data are available. Few countries, however, took the opportunity to expand expenditure on tertiary education in a context where more young people were looking to delay their entry to the labour market because of job shortages. Apart from in Sweden, therefore, only in Malta, Denmark and France was the increase in spending on tertiary education in real terms over the four years 2008-2012 more than over the previous four years.

⁴ Ylä-Anttila, op. cit. See also Halme, Lindy, Piirainen, Salminen and White (2014).

Table 1 Expenditure on education in real terms, 2004-2008 and 2008-2012 (% change)

	Total		Tertiary	
	2004-2008	2008-2012	2004-2008	2008-2012
EU27	9.3	0.8	22.3	-2.7
Malta	6.8	16.5	8.9	43.6
Luxembourg	10.5	15.9	117.6	76.6
Slovakia	19.0	15.2	na	na
Germany	5.2	12.0	15.7	14.4
Denmark	-3.1	9.6	5.4	20.5
France	2.8	8.8	15.9	46.1
Belgium	11.4	8.1	na	na
Poland	23.9	7.0	98.3	4.6
Czech Republic	20.5	6.7	58.7	-5.6
Austria	14.2	5.1	36.3	-2.7
Sweden	6.8	4.7	-2.0	8.6
Netherlands	9.5	4.0	27.3	7.6
Finland	6.5	3.6	9.5	8.0
Slovenia	15.0	-3.8	17.7	7.6
Estonia	30.9	-4.1	112.8	6.7
Cyprus	23.4	-4.2	64.5	-15.9
Ireland	31.0	-6.5	45.6	6.1
UK	20.4	-6.6	20.5	-11.9
Lithuania	32.1	-7.9	86.7	16.9
Spain	18.0	-8.4	28.5	1.4
Italy	0.0	-10.9	13.1	-13.5
Hungary	-1.0	-13.7	14.3	2.7
Portugal	-3.2	-14.2	-6.1	-13.8
Bulgaria	28.6	-17.4	66.6	-9.2
Greece	18.3	-20.7	73.7	-18.2
Latvia	41.1	-25.1	na	-16.2
Romania	58.6	-36.0	na	-44.4

Note: The figures show the change in nominal expenditure converted to real terms by the GDP deflator. The figure for Spain for tertiary education in the final column refers to 2008-2011

Source: Eurostat, General Government expenditure by function

4. Concluding remarks

The above review of the literature on the effects of economic downturns and, more particularly, prolonged spells of unemployment on young people leaving education and entering the labour market indicates the damaging consequences it is likely to have. Those who are unfortunate to have to make the transition from education into work during the present crisis and experience a spell of unemployment as a result can, therefore, on average, expect to face more difficulty in remaining in employment throughout their future working life and to receive lower lifetime earnings than those beginning their working career during more favourable times. This, of course, is only an average relationship and it is likely to apply to only a minority of young people entering the labour market during the crisis. Nevertheless, virtually all of the studies carried out find evidence of adverse effect of this kind which persists for a number of years.

The difference between the findings of the various studies relates to a large extent to the duration of such an effect. Some estimate that it persists for many years or even throughout the lifetime of the young people concerned. Most, however, find that for the probability of being out of work in the future at least, there is a catching up process which is completed within 2-3 years. For future earnings, on the other hand,

the length of time people experience lower wages than those with similar characteristics who began their working career under more favourable circumstances tends to be much longer, around 10 years or so in many cases.

The length of time seems to vary, perhaps not unexpectedly, according to education attainment levels and whether or not spells of unemployment are experienced regularly throughout a person's working life. Most studies find that young people with tertiary education (i.e. university graduates) are much less affected in the long-term by an initial period of unemployment than those with lower education levels while those suffering relatively frequent periods of being out of work are more likely to experience long-term, or even permanent, effects.

At the same time, it is probably the case that young people entering the labour market during the present crisis will tend, in general, to be affected over a longer period of time than those with similar levels of education who began their working careers in previous economic downturns, and on whose experience present estimates of the effect are based simply because of the scale and duration of the crisis. The studies carried out for Sweden and Finland, however, are perhaps more likely to give a reasonable indication of the nature and size of the potential effects because of the much bigger recessions that they experienced during the early 1990s than other EU Member States, recessions which were therefore more similar to the present crisis and which also involved a financial as well as an economic crisis. Indeed, many of the studies referred to above relate to Sweden, not necessarily because of its past experience but because of the availability of longitudinal data.

Because of its effects on the probability of being employed and on earnings over the long-term, the crisis also has potentially damaging consequences for the income, risk of poverty and chances of social exclusion of the young people concerned over their lifetimes, as well as for their physical and mental health, leading, the evidence suggests, to a higher incidence of suicides.

There is also evidence of increased numbers of young people moving from countries which have most affected by the crisis to those where employment opportunities are more numerous and future prospects more favourable. This seems to be especially the case for the better-educated among them, which could harm the future growth potential of the countries they leave behind.

Few studies have been carried out on the extent to which the present crisis is likely to have a long-term depressing effect on the growth potential of EU economies in general – or at least the great majority of them which have experienced high levels of unemployment over the crisis years – through the depletion of human capital that prolonged spells of unemployment give rise to. Those that have been, however, suggest that the effect might be significant and long-lasting.

At the same time, policy lessons can also be learned from policy response in Finland and Sweden to the deep recession that they suffered in the early 1990s and the prolonged period of high unemployment among young people that followed. Both adopted a strategy of strengthening education systems and of widening access to education particularly for those with inadequate qualifications as well as increasing the number acquiring university degrees or the equivalent in order to boost the future productive potential, and competitiveness, of the economy, as well as lowering unemployment. It is important in this regard that the education and training provided relates to future skill needs on the labour market. Although these may be difficult to identify with any precision given the uncertainty about the effect of the crisis on longer-term trends in the structure of the economy, it is almost certain that they will involve knowledge of ICT and the capacity to research into technologies generally. These are areas in which both countries have invested heavily in the past. Over the crisis period, however, few countries have taken the opportunity to invest more in education generally. Indeed, 10 of the 25 EU Member States for which data are available reduced spending on tertiary education over the period 2008-2012 and only three (Denmark, France and Malta), apart from Sweden, increased expenditure by more over these four years than over the previous four.

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