ESRI

Working Paper No. 394

July 2011

Transitions to Long-Term Unemployment Risk Among Young People: Evidence from Ireland

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Abstract: Many young people have short spells of unemployment during their transition from school to work; however, some often get trapped in unemployment and risk becoming long-term unemployed (OECD, 2009). Much research has been undertaken on the factors that influence unemployment risk for young people during their school-to-work transition. However, very little is known about the factors associated with long-term unemployment risk for those youths that become unemployed. This paper attempts to fill this gap in the literature by identifying the characteristics associated with young peoples' long-term unemployment risk in Ireland. The research, which is conducted using multivariate statistical analysis, uses a combination of unemployment register data and information gathered from a specially designed claimant questionnaire that was issued to all jobseekers making an unemployment benefit claim between September and December 2006. The results indicate that factors such as a recent history of long-term unemployment, a lack of basic literacy/numeracy skills and low levels of educational attainment, all have a significant impact on the likelihood that young people will remain unemployed for 12 months or more. A number of attributes are gender specific, such as the presence of children, additional welfare benefits and spousal earnings for females, and apprenticeship training and participation in a public sector job creation scheme for males. Comparisons with the characteristics associated with older welfare claimants long-term unemployment risk, reveal some interesting difference between younger and older unemployed individuals.

Key Words: Youth Unemployment, Long-term Unemployment Risk, Ireland.

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Transitions to Long-Term Unemployment Risk Among Young People: Evidence from Ireland

I Introduction

Many young people have short spells of unemployment during their transition from school-to-work; however, some get trapped in unemployment and risk becoming long-term unemployed (OECD, 2009a)[1]. The severity of the current global recession has increased the danger of this outcome among young adults, particularly disadvantaged youth that left school early without basic education (Scarpetta, Sonnet and Manfredi, 2010). The most recent OECD unemployment duration data indicates that the percentage of young people[2] in long-term unemployment[3] has started to increase over the course of the present downturn, particularly in those countries that have been worst affected by the recession (Table 1). In general, young people are somewhat more vulnerable to unemployment during an economic downturn due to their concentration in temporary jobs and cyclically-sensitive industries (OECD, 2009b)[4]. Thus, a key priority of governments at present should be the introduction of measures to minimise the impact of the recession on young people. In particular, initiatives need to be implemented to prevent people from falling into long-term unemployment (LTU), because of its deskilling and scarring effects for the individual and the negative implications that it has for society at large (social welfare costs, lost revenue, crime, etc.).

<Table 1 Here>

Much research has been undertaken on the factors that influence unemployment risk for young people during their school-to-work transition (Bradley and Taylor (1991), Harris (1996), Shavit and Müller (1998), Gangl (2001), Ryan (2001), McVicar and Anyadike-Danes (2002), Müller and Gangl (2003), Dietrich and Kleinert (2004), Audas, Berde and Dolton (2005), Verhofstadt and Elsy (2006), Smyth (2008), Vanoverberghe, Verhaest, Verhofstadt and Omey (2008)). Across most countries, educational qualifications and vocational training, along with macroeconomic conditions, have been identified as the most significant determinants of unemployment risk during this period[5]. However, very little is known about

1 http://www.oecd.org/dataoecd/54/62/43765276.pdf
2 Defined as those aged 15 to 24 years of age.
3 As a percentage of total unemployment.
4 http://www.oecd.org/dataoecd/54/50/43766254.pdf
5 No empirical support has been identified for institutional factors (for example, wage-bargaining institutions, union density and the extent of youth activation and training measures) having an impact on youth unemployment risk during the school-to-work transition phase (Müller and Gangl, 2003). However, Breen (2005), using data from 27 OECD countries, found that, in general, youth unemployment was higher in labour markets that had legislation that restricted employers in their ability to dismiss workers. Using a panel of 19 OECD countries, Jimeno and Rodriguez-Palenzuela (2002) also found that labour market institutions (the unemployment benefit system, extent of active labour market policies, wage determination, the tax wedge and employment protection legislation), along with demographic and macroeconomic variables, had a positive impact on youth unemployment.

the factors associated with long-term unemployment risk for those youths that become unemployed. Apart from Isengard (2003), who found that education level was the strongest determinant of long-term unemployment risk among young people in Germany and Britain, research in this area is limited[6]. Analysis of the risk factors associated with the incidence of long-term unemployment for the general unemployed population is also quite scarce. With respect to general long-term unemployment risk, the limited existing research also confirms that educational qualifications are a key determinant[7]. In addition, literacy/numeracy problems, age, nationality, marital status, the presence of children and place of residence were all found to play a role (Obben, Engelbrecht and Thompson (2002), OECD (2003), Livanos (2007), Botrić (2009), Alhawarin and Kreishan (2010) and O'Connell, McGuinness and Kelly (2010))[8]. The research undertaken in this paper attempts to fill this gap in the youth unemployment literature by identifying the characteristics associated with young peoples' long-term unemployment risk in Ireland. The research uses a combination of unemployment register data and information gathered from a specially designed claimant questionnaire that was issued to all jobseekers making an unemployment benefit claim between September and December 2006. As with many countries, Ireland's labour market has been severely affected by the recent global downturn, with unemployment increasing from 4.4 per cent in 2006 to 14.7 per cent in 2011 (Central Statistics Office (CSO), 2011a). However, unemployment rates are much higher among youths, with 37 per cent of those aged 15 to 19 unemployed in the fourth quarter of 2010 and 27 per cent of those aged 20-24 (CSO, 2011b). The objective of this paper is to develop a profile of those at highest risk of long-term unemployment that can in turn be of use in the context of activation policies aimed at preventing long-term youth unemployment.

The research undertaken in this paper builds on Isengard's (2003) work by analysing the impact of a wide variety of socio-economic characteristics, along with detailed employment / unemployment / benefit history information, on the incidence of long-term unemployment among unemployed youths. Due to the large volume of work that exists illustrating that males and females face different labour market situations, separate gender analyses are carried out as well. Comparisons are then made between both males and females to investigate if some characteristics are gender specific. In addition, the risk factors that are identified for male and female youths are compared against those for their older counterparts.

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6 Some descriptive analyses have been undertaken on youth long-term unemployment. For example, based on labour force survey data from 25 countries, the OECD (2005) found that there are wide differences across countries in the proportion of young adults who are long-term unemployed and that this cross-country discrepancy appears to be related to educational attainment (see also Quintini and Martin, 2006). Russell and O'Connell (2001) have looked at the factors that influence the transition from unemployment to work among young people but not specifically the characteristics associated with long-term unemployment risk. Malmberg-Heimonen and Julkunen (2006) analysed the impact of immigrant status on the exit routes from unemployment among longer-term unemployed youths but they did not address the question of what initially determines if a young unemployed person becomes long-term unemployed.

7 Alhawarin and Kreishan (2010) did not find that education had a strong effect in predicting long-term unemployment in Jordan, and Livanos (2007) obtained a similar result for Greece.

8 Some research exists on the determinants of unemployment risk (see, for example, Arai and Vilhelmsson (2004) and Thapa (2004)) but less on the factors associated with becoming long-term unemployed.

The paper is structured as follows. In Section II, we provide some contextual information on the economic situation in Ireland at present, in addition to the economic status of Irish youths over the course of the current recession. The data and methodology employed in the paper are outlined in Section III. The results from our analysis are presented in Sections IV. Finally, we conclude in Section V with a summary of our findings and some potential policy implications.

II Context

Since the beginning of 2008, Ireland has been in the throes of a deep recession. Output, as measured by Gross National Product (GNP), having grown by 6.3 per cent in 2006 fell by 10.7 per cent in 2009, and fell again in 2010, albeit at a slower pace (Barrett, Kearney, Goggin and Conefrey, 2010a). The severe deterioration that has taken place in the economy has had an obvious knock-on effect in the labour market. In particular, unemployment has increased from 4.4 per cent in 2006 to 14.7 per cent in 2011 (CSO, 2011a).

Figures 1 and 2 give a breakdown of unemployment trends by education-level between 2007 and 2010. The figures illustrate that male workers have been most severely affected by the current economic crisis, particularly those with low levels of education i.e. less than Upper Secondary qualifications (Figure 1). Within this group, male youths have experienced the largest growth in unemployment, which has increased by 22 percentage points to 41 percent over the course of the recession.

<Figure 1 Here>

<Figure 2 Here>

In addition to the growth in unemployment among young people during the economic downturn, there has also been an increase in the numbers in inactivity (Figure 3). Sixty percent of young females that left school early were not economically active in the first quarter of 2010, an increase of 11 percentage points over two years. However, the largest increase in inactivity over this period has been among male youths with Higher Secondary education and above (16 percentage point increase to 42 percent). Recent research on this issue indicates that a large proportion of these young people that are no longer active in the labour force are now engaged in education (Barrett, Kearney, Goggin and Conefrey, 2010b), which is a positive development for both the individuals themselves and for future productivity when the economy recovers.

<Figure 3 Here>

III Data and Methodology

Data

The data used in this paper came from a specially devised questionnaire that was administered to all individuals registering an unemployment claim in the Republic of Ireland over a 13 week period between September and December 2006. These individuals were subsequently tracked for a further 78 weeks (June 2008). Information on educational attainment, literacy/numeracy levels, health, access to transport, employment/unemployment/job history, and participation on public job schemes, specifically the Community Employment (CE) scheme[9], was captured in the questionnaire. Additional data on these profiled individuals marital status, children, spousal earnings and geographic location were obtained from the Live Register, which is an administrative dataset that contains information on all individuals in receipt of unemployment benefits in Ireland.

The initial population database consisted of 60,189 benefit recipients. After the elimination of duplicate records (1,164), claimants that had not registered for Jobseekers Allowance (JA) or Jobseekers Benefit (JB) (1,533) [10], individuals that did not have their claims awarded (12,760), those that did not complete the survey questionnaire (10,978)[11] and individuals whose reason for signing off the Live Register was unknown (2,992), our final sample consisted of 30,762 unemployment claimants whom we know exited the Live Register to employment. Of this, 6,366 were aged between 18 and 24 (3,879 males and 2,487 females), which is our youth sample, and 24,396 (13,895 males and 10,537 females) aged between 25 and 67.

In this paper, we define long-term unemployment as a continuous presence on the Live Register for 12 months or more. Given that the population for the study was constructed over a 13 week period, we selected a 65 week cut-off point to allow for the possibility that each individual could have remained on the Live Register for at least 12 months. Those claimants that signed on for 12 months or more are hereafter referred to as 'stayers', while those that had their unemployment claim closed and had left the Live Register to

[9] The CE scheme, which is Ireland's main public sector job creation programme, is operated by the national employment and training agency FÁS. The scheme is designed to help long-term unemployed and other disadvantaged individuals to get back to work by offering part-time and temporary placements in jobs based within local communities.

[10] JA and JB are Ireland's two unemployment benefits. JA is a means-tested payment and JB is based on social insurance contributions.

[11] Checks undertaken on the survey non-respondents (using data from the Live Register) to ensure that they did not differ significantly from those that answered the questionnaire revealed that both samples were almost identical: a slightly higher proportion of non-respondents were non-Irish but the difference was minor and we are confident that our sample is representation of the total unemployment benefit claimant population.

employment at some point prior to week 65, and did not have a subsequent JA or JB unemployment application activated, are defined as 'leavers'[12]. Given these definitions, 63 per cent (4,005) of our youth sample had left the Live Register to take up employment at 65 weeks while 37 per cent (2,361) remained on the Live Register. This compares with 60 per cent (14,751) and 40 per cent (9,645) respectively for older claimants. Thus, a slightly smaller proportion of youths became long-term unemployed.

Methodology

In order to identify the characteristics associated with LTU risk in Ireland, we estimate binary probit models where our dependent variable equals one if a claimant had exited the Live Register to employment before 12 months (and did not have a subsequent unemployment application activated) and zero otherwise. Duration analysis has been frequently used in the school-to-work transition literature but binary choice models[13] have been the preferred methodology adopted by those that have analysed long-term unemployment risk (Obben, Engelbrecht and Thompson (2002), Livanos (2007), Botrić (2009), Alhawarin and Kreishan (2010) and O'Connell, McGuinness and Kelly (2010)). As the focus of this paper is to *quantify* the impact of various characteristics on the likelihood that an unemployed youth will become long-term unemployed, we have selected to employ the binary methodology in this paper as it allows for the calculation of marginal effects which in turn facilitates a wider range of hypothesis testing, such as is presented in the later stages of this paper[14].

We estimate separate gender models for both youth (aged 18-24) and older (aged 25-67) unemployment benefit claimants in order to examine whether the characteristics associated with long-term unemployment risk differ between male and female youths, and also their older counterparts.

Our models control for a wide range of socio-demographic characteristics, labour market experiences and welfare history, including age, marital status, education, prior apprenticeship training, literacy/numeracy problems; English proficiency, health; size of local labour market; geographic location; own transport; access to public transport; employment history; current and previous job duration (for those employed and unemployed respectively); casual employment status, willingness to move for a job; previous unemployment claim history; participation in the CE scheme; benefit type (JA and JB);

[12] We made two adjustments to our initial leaver sample: i) individuals whose JA or JB claims were closed at the end of the 65 week period but who moved across to alternative benefits were redefined as stayers, and ii) individuals who had exited the Live Register by week 65 but who had accumulated 52 weeks or more of unemployment duration were redefined as stayers because they met the criteria for LTU. One adjustment was also made to the stayer sample: any claimant that had left the Live Register for a substantial period (i.e. for more than six weeks) during the 65 week observation period was redefined as a leaver.

[13] Logit and Probit models.

[14] The pattern of results from the probit model is consistent with those of a Cox Proportional Hazard model (results available from the authors).

number of claims and spousal earnings. As indicated earlier, information on these covariates came from a combination of both the claimant questionnaire and the Live Register database.

IV Results

Bivariate Analysis

Table 2 examines some of the key characteristic differences between leavers and stayers, separately for younger and older benefit claimants. The age difference between young leavers and stayers is marginal, whereas older welfare claimants that left the Live Register are, on average, three years younger than those that remained unemployed. There is no gender variation between leavers and stayers. In terms of marital status, single individuals seem to be more likely to exit unemployment to the labour market than their married and cohabiting (younger welfare claimants only) counterparts. Those in good health are also more likely to leave the Live Register to take up employment, particularly older claimants where 95 per cent of leavers reported a health status of very good/good compared to 87 per cent of stayers.

A serious issue that emerges from the statistics presented in Table 2 is that quite a proportion of those that remain unemployed have severe literacy/numeracy problems: in terms of younger claimants, the percentage of stayers that lack such basic educational skills is almost three times that of leavers, whereas it is twice that among older claimants. A lack of basic numeracy/literacy skills could severely hamper full labour market participation. Lower levels of educational attainment may also impede a claimant from gaining employment, and the descriptives on this factor (Table 2) would suggest that this is the case: 13 per cent of youth claimants that remained on the Live Register have primary or less educational qualifications compared to only 4 per cent of leavers, whereas a higher proportion of young individuals that exit to employment have third-level education (28 per cent compared to 12 per cent of stayers). The same educational attainment trends exit for older welfare claimants.

A few other noteworthy differences between stayers and leavers that emerge from Table 2 is that those that are willing to move for a job are more likely to leave the Live Register. The same is true for those that have access to their own transport, which could be because this factor enables individuals to search for employment over a greater geographic area. Claimants with a recent attachment to the labour market are also more likely to exit the Live Register to employment. Interestingly, although perhaps not a surprise, unemployment benefit claimants that received a claim in the past 5 years and were in receipt of such a payment for 12 months or more i.e. those that have experienced a spell of long-term unemployment in the past, are less likely to leave the Live Register. Finally, claimants that

participated on the CE scheme in the past 5 years, which is a public job scheme that has the objective of helping long-term unemployed and other disadvantaged workers to get back to work, were less likely to exit the Live Register to employment, particularly older CE scheme participants.

<Table 2 Here>

Separate gender descriptives for leavers and stayers reveal similar patterns to those observed in Table 2[15]. However, some noteworthy differences exist: i) literacy/numeracy problems is a bigger issue among males, ii) males have lower levels of educational attainment, iii) a higher proportion of males have experienced a spell of long-term unemployment, and iv) a larger proportion of females whose spouses earn in excess of €351 per week remain on the Live Register.

Based on this bivariate analysis, a lack of basic literacy/numeracy skills, educational qualifications, previous experience of long-term unemployment and spousal earnings are likely to emerge as being important predictors of young people's likelihood of becoming long-term unemployed.

Multivariate Analysis

The results from our youth probit models of becoming long-term unemployed, both male and female, are presented in Table 3[16]. The marginal effects that are presented for each model indicate the impact that each covariate has on the probability of a claimant leaving the Live Register for employment after 12 months, holding the other characteristics that are included in the specifications constant.

In relation to male youths (Column 1), educational attainment is one of the most important factors in preventing them from becoming long-term unemployed: compared to those with no formal qualifications, young male claimants with upper secondary or a third-level qualification were less likely to be unemployed for 12 months or more (17 and 22 per cent respectively). Recent labour market attachment is another key determinant in preventing young males from entering LTU, with those employed in the last month or year being more likely to exit unemployment before 12 months (compared to those that had never been employed). The same is true for males whose current job duration is between one and twelve months. On the other hand, young males with a previous history of LTU, measured here as those males that had signed on the Live Register for 12 months or more in the

[15] Data available from the authors on request.

[16] County controls are included in each model: the results are not presented here but are available from the authors on request.

previous five years, were 12 per cent less likely to exit unemployment to employment before 52 weeks. A lack of basic literacy/numeracy skills is another key determinant of LTU for young males: those claimants that lacked such basic competencies were 7 per cent less likely to exit the Live Register before 52 weeks.

The results for the female youth model are presented in Column 2 (Table 3). While some of the predictors of LTU are similar to those identified for males, the size of the impact varies for both genders. For example, the magnitudes of the effects of educational attainment and basic literacy/numeracy skills on LTU are greater for females, whereas the negative impact of a previous spell of long-term unemployment is smaller. Whether these gender effects are significantly different from each other is investigated in the next section.

There are also some factors that emerge as being specific to each gender. For example, the presence of children and access to public transport each have a negative impact on young females' entry into employment but have no effect on males. Two other important predictors of LTU for females are the number of additional benefits that the claimant is in receipt of and spousal earnings in excess of €351 per week, both of which impact negatively on females entry to employment before 12 months. Both of these effects are suggestive of high reservation wage effects among younger females entering long-term unemployment. Females that indicate that they are willing to relocate for employment purposes are more likely to exit the Live Register before 12 months, an attribute that is not significant for males. On the other hand, location size is a significant predictor of LTU for male youths: those that live in cities are 6 per cent more likely to remain on the Live Register for 12 months or more compared to those that live in rural locations. Apprenticeship training, having access to one's own transports and participating on the CE scheme for 12 months or more are three other factors that are specific to males, each of which increases their likelihood of exiting unemployment to employment before 12 months[17].

<Table 3 Here>

In order to identify if the characteristics associated with LTU had a differential effect on male and female youth claimants, we tested for between model differences in the various characteristics by specifying a series of interaction terms[18]. The results of this work, which are presented in Table 4, indicate that a small number of attributes have a differential gender effect. For example, the presence of children has a significantly negative impact on a young female's likelihood of exiting the Live Register before 12 months: 17 per cent less likely compared to males. The number of claims that a claimant receives and spousal earnings in excess of €351 per week also have a negative effect on a female's probability of

[17] The spousal earnings and CE scheme results need to be interpreted with caution as the number of observations on which each coefficient is estimated is quite small.

[18] Males are the reference category.

entering employment before 52 weeks: 47 and 35 per cent respectively. Both of these effects suggest that younger females with access to additional incomes, be it through a high earning spouse, child benefits or additional social welfare claims, are more likely to drift into long-term unemployment. While third-level education has a positive impact on both male's and females' likelihood of exiting the Live Register before 12 months, this factor has a bigger impact on females: 12.5 per cent more likely to enter employment before 52 weeks compared to males. Females living in a city are also more likely to exit unemployment than males (9.3 per cent). On the other hand, access to public transport has a significantly negative impact on employment entry for female youths (-8.3 per cent).

<Table 4 Here>

We next investigated if the factors associated with LTU had a differential effect on younger and older welfare claimants. This work was undertaken by testing for between model differences in the various characteristics, separately for younger and older male welfare claimants, and younger and older female claimants[19]. The results from this work are presented in Tables 5 and 6 respectively[20].

Focussing on the male results first (Table 5), age, educational qualifications and recent labour market attachment all have a higher relative impact on young males' likelihood of exiting the Live Register to employment before 12 months. Health status, specifically very good/good health, is a more important attribute for older male claimants. Interestingly, young males that have had an unemployment claim in the previous five years are less likely to exit unemployment before 52 weeks compared to their older male counterparts. Both younger and older male claimants that have a history of long-term unemployment are less likely to exit the Live Register before 12 months. However, the magnitude of the negative impact is greater for older claimants such that their younger equivalents are more likely to enter employment before 12 months. A similar result emerges in relation to participation on the CE scheme for 12 months or more: this factor has a large negative impact on older claimants and a weakly positive effect on younger males, which results in the CE scheme having a positive impact on younger male claimant's likelihood of exiting unemployment before 12 months. Thus, the scarring effects of short-term (long-term) unemployment spells appear more severe for younger (older) males.

<Table 5 Here>

In relation to females (Table 6), as with younger male claimants, age, educational qualifications and recent labour market attachment are all important predictors of young

[19] Results for the older claimant probit models, both male and female, are available from the authors on request.

[20] Older male and female claimants are the respective reference categories in each model.

females' likelihood of exiting unemployment to employment before 12 months. The differences that emerged between younger and older male claimants in relation to health status, long-term unemployment history and the CE scheme are also the same for females. Interestingly, the presence of children, the number of claims that a claimant receives and spousal earnings in excess of €351 per week each have a negative impact on both younger and older females likelihood of exiting the Live Register before 52 weeks. However, the negative impact is much larger for younger females such that they are less likely to exit to employment before 12 months, a result which again reinforces the higher reservation wage point made earlier.

<Table 6 Here>

Given the number of attributes that emerged as being specific to female youths LTU risk, we took a closer look at the characteristics of young females that have a predicted probability of becoming long-term unemployed in excess of 80 per cent compared to those with a moderate to low risk level (i.e. predicted probability of less than or equal to 50 per cent). In terms of demographics (Table 7), female youths with a high risk of becoming long-term unemployed are more likely to cohabit or be married, have children and not be in good health compared to their moderate to low risk counterparts. More interestingly, those with a high risk of LTU have very low levels of education, and a considerably higher proportion have literacy/numeracy problems. Regarding employment history, a higher percentage of those with a low risk of becoming long-term unemployed have more recent labour market attachment, and are also more likely to move for a job. In relation to unemployment benefit history, while a smaller number of those at high risk of becoming long-term unemployed have claimed unemployment benefit in the last five years, a larger percentage have been signing on for 12 months or longer; thus, more of those at risk have had previous experience of LTU. Finally, regarding additional claims, while the average number of additional benefits being claimed by young females with a high risk of becoming LTU is quite similar to their moderate to low risk counterparts, the maximum number of additional benefits being obtained by female youths with a high risk of LTU is four compared to only two by moderate to low risk females.

<Table 7 Here>

V Conclusions

This paper investigated the factors associated with youth long-term unemployment risk in Ireland, using data from Ireland's unemployment benefit registration database (the Live Register) and a specially devised questionnaire that was administered to all individuals that made an unemployment claim in the Republic of Ireland between September and December

2006. The analysis was undertaken separately for young males and females in order to identify if some of the factors associated with LTU are gender specific. Comparisons were also made with the characteristics associated with older welfare claimants' long-term unemployment risk.

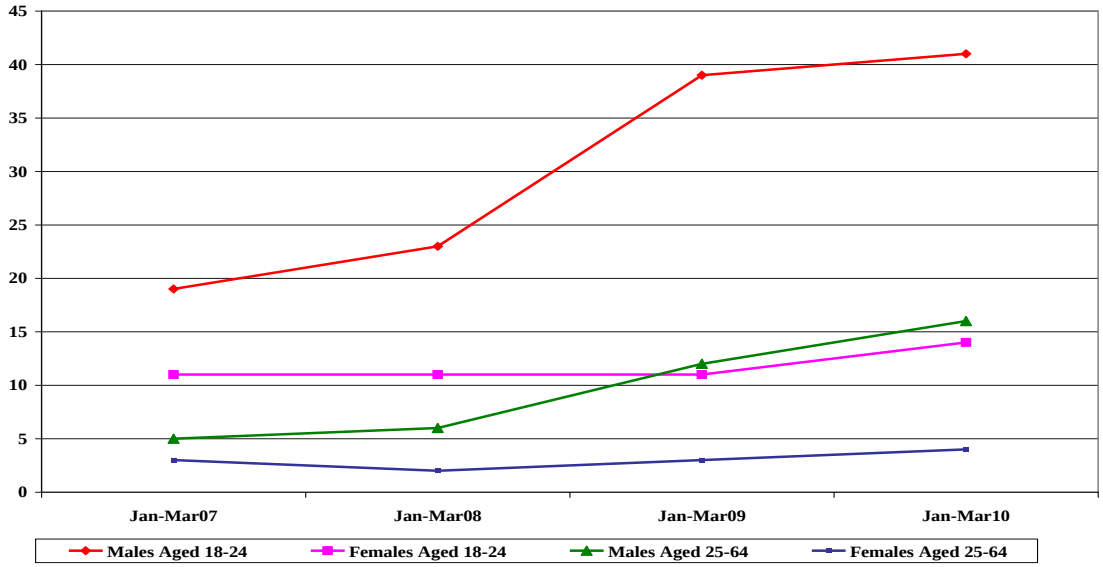
The results from the male youth model indicate that those with previous experience of long-term unemployment, literacy/numeracy problems, no formal education qualifications and/or live in large urban areas have a higher risk of becoming long-term unemployed. The results from the female model are broadly similar to those for males. However, some factors were specific to female youths. In particular, the presence of children, spousal earnings in excess of €351 per week and the number of welfare benefits that a claimant received all had a significantly negative effect on young females' likelihood of exiting unemployment to employment before 12 months.

When we compared the LTU risk factors for younger and older male welfare claimants, we found that educational qualifications and recent labour market attachment had a positive impact on young males' probability of exiting the Live Register before 52 weeks, while health was an important characteristic for older male claimants. In relation to females, the presence of children, spousal earnings and the number of additional benefits that a claimant received each had a negative impact on younger and older females' likelihoods of exiting the Live Register; however, the negative impact was much larger for younger females such that they were less likely to exit unemployment before 12 months.

One of the findings from this research is that the presence of children, high spousal earnings and additional welfare claims are all factors that increase female youth's risk of becoming long-term unemployed. However, the proportion of the young female claimant population that is affected by these attributes is quite small: only 3 per cent have children, 2 per cent have high earning spouses and 2 per cent are in receipt of additional welfare claims. Other characteristics that have been identified as increasing young people's LTU risk, and which affect bigger proportions of both the male and female populations, are low levels of educational attainment (9 per cent of young males and 5 per cent of young females have no formal qualifications), literacy/numeracy problems (11 and 5 per cent of males and females respectively) and a history of long-term unemployment (10 and 7 per cent of males and females respectively). It is important to highlight the attributes that are specific to female youths LTU risk, and for policymakers to consider initiatives that would help to address these factors, such as the introduction of more affordable childcare facilities. However, given that only a small percentage of the youth population are affected by these attributes, it would seem to be more rational, from both an equity and budgetary perspective, for policy measures to focus predominately on dealing with the more substantive youth LTU risk factors that have been identified in this research (e.g. literacy/numeracy problems).

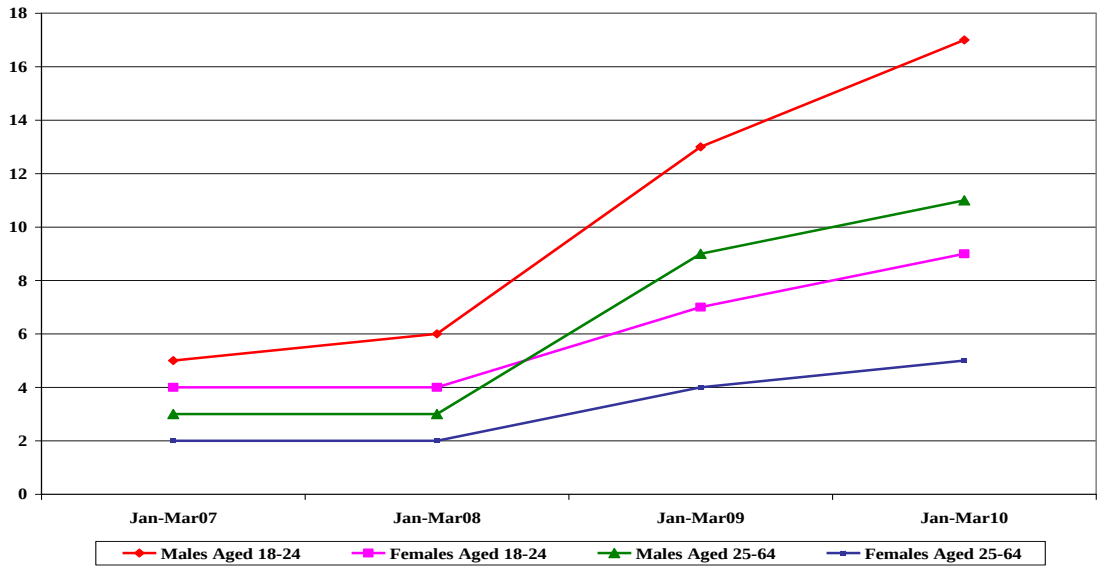
Figures

Figure 1 Unemployment Rates[21] of Individuals with Lower Secondary or Less Educational Attainment: 2007-2010



Source: Constructed with data from the Quarterly National Household Survey (Q1) 2010, Central Statistics Office (2010).

Figure 2 Unemployment Rates[22] of Individuals with Higher Secondary or Above Educational Attainment: 2007-2010

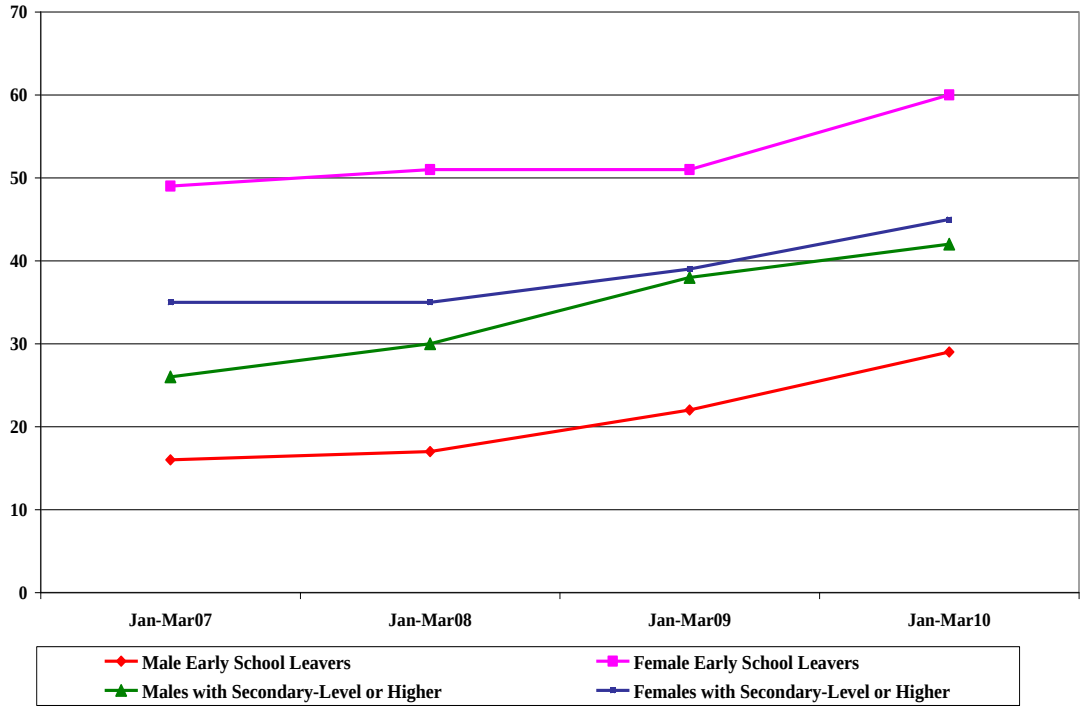


Source: Constructed with data from the Quarterly National Household Survey (Q1) 2010, Central Statistics Office (2010).

[21] Persons unemployed as a percentage of all persons in the population.

[22] Persons unemployed as a percentage of all persons in the population.

Figure 3 Percentage of Young People Not Economically Active: 2007-2010



Source: Constructed with data from the Quarterly National Household Survey (Q1) 2010, Central Statistics Office (2010).

Tables

Table 1: Incidence of Long-term Unemployment Among Youth[1]

	2007 %	2008 %	2009 %
Iceland	..	2	3
Ireland	21	20	25
Spain	16	16	25
United Kingdom	16	16	19
United States	7	7	12

[1] *Long-term unemployment (12 months or more) of youth (15-24) as a percentage of total unemployment of youth*

Source: OECD database on Unemployment Duration[23]

[23] http://www.oecd.org/document/34/0,3343,en_2649_33927_40917154_1_1_1_1,00.html#uduration

Table 2: Key Characteristic Information on Youth and Older Claimant Stayers and Leavers

	Youth Stayers	Youth Leavers	Older Stayers	Older Leavers
Demographics:				
Age	21.2	21.9	41.7	39.4
Gender:				
Male	60.4	61.2	56.5	57.0
Female	39.6	38.8	43.5	43.0
Marital Status:				
Single	92.8	95.5	38.4	47.0
Cohabits	3.7	2.4	5.0	4.6
Married	2.9	1.1	46.5	41.8
Separated/Divorced	0.1	0.02	6.7	4.0
Widowed	0.1	0.1	1.1	1.1
Children	1.4	1.3	2.2	2.0
Perceived Health Status:				
Very Good Health	52.9	64.9	47.3	59.5
Good Health	40.9	31.6	39.8	35.3
Fair Health	5.2	2.9	10.6	4.7
Bad Health	0.6	0.1	1.6	0.2
Very Bad Health	0.2	0.1	0.2	0.1
Human Capital Information:				
Literacy/Numeracy Problems	14.1	5.4	8.6	4.5
Human Capital Information:				
Educational Attainment:				
Primary or Less	13.3	3.9	18.1	10.9
Lower Secondary	35.2	24.1	29.6	24.6
Upper Secondary	40.0	43.3	30.0	31.2
Third-level	11.5	28.2	21.6	32.6
Transport and Location:				
Own Transport	23.0	36.7	63.5	70.5
Public Transport	80.1	76.9	71.5	71.1
Location Size:				
Rural	17.3	21.8	27.6	28.9
Village	12.4	12.5	12.6	12.2
Town	24.5	23.7	22.5	21.7
City	45.4	41.8	37.1	37.0

Table 2: Continued

	Youth Stayers (%)	Youth Leavers (%)	Older Stayers (%)	Older Leavers (%)
Employment Information:				
Employment History:				
Still in Employment	4.7	6.8	11.5	15.2
Employed in Last Month	36.0	52.9	48.9	62.2
Employed in Last Year	26.1	26.7	19.0	15.6
Employed in Last 5 Years	10.3	5.8	13.1	4.8
Employed Over 5 Years Ago	0.8	0.4	4.4	0.8
Would Consider Moving for a Job	40.0	50.8	30.4	39.2
Unemployment Benefit/Scheme Information:				
UE Claim in Last 5 Years	54.9	51.0	63.8	67.9
Signing on for 12+ Months	13.5	5.9	25.0	9.9
CE Scheme in Last 5 Years	3.2	2.3	9.6	3.7
On CE Scheme for 12+ Months	0.8	0.6	7.2	2.3
UE Benefit Type:				
Jobseeker's Allowance	76.7	50.1	34.6	19.5
Jobseeker's Benefit	22.8	49.3	59.5	77.3
Number of Claims	1.0	1.0	1.0	1.0
Spousal Earnings:				
€250 or less	0.7	0.7	4.2	4.0
€251-€350	-	0.1	0.6	0.7
€351+	1.0	0.7	21.2	21.7

Table 3: Probit Model of the Determinants of Leaving the Live Register to Employment before 12 Months for Young Male and Female Welfare Claimants (Marginal Effects)

	Male Model	Female Model
Personal and Family Characteristics:		
Age	0.023***	0.028***
	(0.006)	(0.008)
Marital Status Reference Category: Single		
Married	-0.075	0.032
	(0.081)	(0.076)
Cohabits	-0.106*	0.036
	(0.062)	(0.071)
Separate/Divorced	-	0.094
	-	(0.420)
Widowed	-	-0.088
	-	(0.237)
Children	-0.063	-0.229***
	(0.044)	(0.059)
Health Reference Category: Bad/Very Bad Health		
Very Good Health	-0.015	0.062
	(0.088)	(0.145)
Good Health	-0.061	0.020
	(0.090)	(0.142)
Fair Health	-0.091	-0.018
	(0.102)	(0.156)
Spousal Earnings Reference Category: None		
Spouse Earnings €250	0.127	0.041
	(0.123)	(0.098)
Spouse Earnings €351+	-0.005	-0.360***
	(0.158)	(0.089)
Human Capital Characteristics:		
Education Reference Category: Primary Education or Less		
Lower Secondary	0.055*	0.148***
	(0.030)	(0.049)
Upper Secondary	0.165***	0.235***
	(0.029)	(0.050)
Third-level	0.218***	0.344***
	(0.028)	(0.045)
Human Capital Characteristics:		
Apprenticeship	0.048*	-0.001
	(0.026)	(0.043)
Literacy/Numeracy Problems	-0.066**	-0.115**
	(0.030)	(0.056)
English Proficiency	-0.033	0.009
	(0.053)	(0.085)

Table 3: Continued

	Male Model	Female Model
Location and Transport Information:		
Location Reference Category: Rural		
Village	0.001	-0.041
	(0.031)	(0.040)
Town	-0.031	0.037
	(0.029)	(0.036)
City	-0.062**	0.035
	(0.029)	(0.036)
Own Transport	0.035*	0.032
	(0.019)	(0.025)
Public Transport	0.001	-0.080***
	(0.025)	(0.030)
Employment/Unemployment/Benefit History:		
Employment History Reference Category: Never Employed		
Employed in Last Month	0.228***	0.205***
	(0.054)	(0.065)
Employed in Last Year	0.156***	0.139**
	(0.050)	(0.063)
Employed in Last 5 Years	0.130**	0.022
	(0.050)	(0.072)
Employed Over 5 Years Ago	0.075	0.151
	(0.096)	(0.139)
Employment/Unemployment/Benefit History:		
JB Casually Employed	-0.115*	-0.124**
	(0.059)	(0.052)
JA Casually Employed	-0.061	0.016
	(0.056)	(0.051)
Current Job Duration Reference Category: Never Employed†		
Current Job Duration <1 Month	0.096	0.160**
	(0.105)	(0.078)
Current Job Duration 1-6 Months	0.198***	0.178***
	(0.059)	(0.051)
Current Job Duration 6-12 Months	0.206***	0.163**
	(0.066)	(0.068)
Current Job Duration 1-2 Years	0.121	0.056
	(0.106)	(0.085)
Current Job Duration 2+ Years	0.099	0.246***
	(0.087)	(0.050)

Note: †This current job duration information relates to individuals in receipt of JA who are only able to obtain part-time or casual work, or whose days at work have been reduced.

Table 3: Continued

	Male Model	Female Model
Employment/Unemployment/Benefit History:		
Last Job Duration Reference Category: Never Employed		
Last Job Duration <1 Month	-0.114*	-0.037
	(0.062)	(0.076)
Last Job Duration 1-6 Months	-0.066	-0.014
	(0.054)	(0.069)
Last Job Duration 6-12 Months	-0.081	-0.057
	(0.059)	(0.075)
Last Job Duration 1-2 Years	-0.086	0.014
	(0.061)	(0.074)
Last Job Duration 2+ Years	-0.100	-0.070
	(0.062)	(0.078)
Would Move for a Job	0.027	0.048**
	(0.017)	(0.023)
UE Claim Previous 5 Years	-0.045**	-0.025
	(0.019)	(0.024)
Signing on for 12 Months+	-0.122***	-0.085*
	(0.031)	(0.048)
CE Scheme Previous 5 Years	-0.057	0.140*
	(0.055)	(0.076)
On CE Scheme for 12 Months+	0.152*	-0.048
	(0.079)	(0.163)
Unemployment Benefit Type Reference Category: UE Credits		
Jobseeker's Allowance	-0.102	-0.130
	(0.133)	(0.118)
Jobseeker's Benefit	0.029	0.067
	(0.137)	(0.122)
Number of Claims	-0.014	-0.480***
	(0.089)	(0.088)
Observations	3874	2486
Pseudo R-squared	0.123	0.195

Note: County controls included in each specification
Standard errors in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 4 Differences between Models of Male and Female Youth Exits to Employment (Marginal Effects)

	Differences between Male and Female Models
Personal and Family Characteristics:	
Children	-0.165**
	(0.073)
Spousal Earnings Reference Category: None	
Spouse Earnings €351+	-0.354**
	(0.171)
Human Capital Characteristics:	
Education Reference Category: Primary Education or Less	
Lower Secondary	0.096*
	(0.057)
Upper Secondary	0.070
	(0.059)
Third-level	0.125**
	(0.060)
Location and Transport Information:	
Location Reference Category: Rural	
City	0.093**
	(0.043)
Public Transport	-0.083**
	(0.041)
Employment/Unemployment/Benefit History:	
Number of Claims	-0.465***
	(0.125)
Observations	6,362
Pseudo R-squared	0.151

Note: Males are the reference category
County controls included in each specification
Standard errors in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 5 Differences between Models of Younger and Older Male Exits to Employment (Marginal Effects)

	Differences between Models
Personal Characteristics:	
Age	0.029***
	(0.006)
Health Reference Category: Bad/Very Bad Health	
Very Good Health	-0.176*
	(0.105)
Good Health	-0.201*
	(0.104)
Fair Health	-0.137
	(0.114)

Table 5 Continued

	Differences between Models
Human Capital Characteristics:	
Education Reference Category: Primary Education or Less	
Lower Secondary	0.054*
	(0.032)
Upper Secondary	0.123***
	(0.031)
Third-level	0.144***
	(0.035)
Employment History:	
Employment History Reference Category: Never Employed	
Employed in Last Month	0.127**
	(0.059)
Employed in Last Year	0.145***
	(0.056)
Employed in Last 5 Years	0.148**
	(0.058)
Employed Over 5 Years Ago	0.128
	(0.098)
Benefit History:	-0.112***
UE Claim Previous 5 Years	(0.023)
	0.051*
Signing on for 12 Months+	(0.031)
	0.215***
On CE Scheme for 12 Months+	(0.073)
Observations	17,733
Pseudo R-squared	0.123

Note: Older male claimants are the reference category
County controls included in each specification
Standard errors in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 6 Differences between Models of Younger and Older Female Exits to Employment (Marginal Effects)

	Differences between Models
Personal Characteristics:	
Age	0.030***
	(0.008)
Children	-0.177***
	(0.061)
Health Reference Category: Bad/Very Bad Health	
Very Good Health	-0.321**
	(0.149)
Good Health	-0.299**
	(0.150)
Fair Health	-0.236
	(0.168)
Spousal Earnings Reference Category: None	
Spouse Earnings €351+	-0.270***
	(0.098)
Human Capital Characteristics:	
Education Reference Category: Primary Education or Less	
Lower Secondary	0.145***
	(0.050)
Upper Secondary	0.206***
	(0.044)
Third-level	0.257***
	(0.039)
Employment/Unemployment/Benefit History:	
Employment History Reference Category: Never Employed	
Employed in Last Month	0.104
	(0.075)
Employed in Last Year	0.139**
	(0.071)
Employed in Last 5 Years	0.101
	(0.078)
Employed Over 5 Years Ago	0.279***
	(0.091)
UE Claim Previous 5 Years	-0.177***
	(0.028)
Signing on for 12 Months+	0.109**
	(0.043)
CE Scheme Previous 5 Years	0.219***
	(0.069)
Number of Claims	-0.200**
	(0.098)
Observations	13,023
Pseudo R-squared	0.155

Note: Older female claimants are the reference category
County controls included in each specification
Standard errors in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 7: Characteristics Information on Female Youths with a High Risk and Moderate to Low Risk of Becoming Long-term Unemployed

	Predicted Probability of LTU > 80%	Predicted Probability of LTU < =50%
Demographics:		
Age	21.5	22.1
Marital Status:		
Single	87.3	94.9
Cohabits	6.7	2.8
Married	4.3	1.3
Separated/Divorced	0.8	0.1
Widowed	0.2	0.2
Children	1.2	1.0
Perceived Health Status:		
Very Good Health	62.5	70.8
Good Health	31.7	26.8
Fair Health	5.1	2.0
Bad Health	0.6	0.2
Very Bad Health	0	0.05
Human Capital Information:		
Literacy/Numeracy Problems	10.8	1.8
Educational Attainment:		
Primary or Less	8.7	1.0
Lower Secondary	16.3	10.5
Upper Secondary	41.1	43.0
Third-level	32.9	45.8
Employment Information:		
Employment History:		
Still in Employment	10.4	12.5
Employed in Last Month	36.6	53.0
Employed in Last Year	26.6	28.1
Employed in Last 5 Years	7.8	3.8
Employed Over 5 Years Ago	0.9	0.2
Would Consider Moving for a Job	48.1	54.7
Unemployment Benefit/Scheme Information:		
UE Claim in Last 5 Years	32.3	46.8
Signing on for 12+ Months	6.0	3.8
Number of Claims	1.07	1.0

References

Alhawarin, I. M. and F.M. Kreishan. (2010). "An Analysis of Long-Term Unemployment (LTU) in Jordan's Labor Market", *European Journal of Social Sciences*, 15 (1): 56-66.

Arai, M. and R. Vilhelmsson. (2004). "Unemployment-Risk Differentials Between Immigrant and Native Workers in Sweden", *Industrial Relations: A Journal of Economy and Society*, 43 (3): 690-698.

Audas, R., E. Berde and P. Dolton. (2005). "Youth Unemployment and Labour Market Transitions in Hungary", *Education Economics*, 13 (1): 1-25.

Barrett, A., I. Kearney, J. Goggin, and T. Conefrey. (2010a). *Quarterly Economic Commentary, Summer 2010*. Dublin: Economic and Social Research Institute.

Barrett, A., I. Kearney, J. Goggin, and T. Conefrey. (2010b). *Quarterly Economic Commentary, Spring 2010*. Dublin: Economic and Social Research Institute.

Botrić, V. (2009). "Unemployed and Long-Term Unemployed in Croatia: Evidence from Labour Force Survey", *Revija za Socijalnu Politiku*, 16(1): 25-44.

Bradley, S. and J. Taylor. (1991). "An Empirical Analysis of the Unemployment Duration of School-Leavers", *Applied Economics*, 24 (1): 89-101.

Breen, R. (2005). "Explaining Cross-National Variation in Youth Unemployment", *European Sociological Review*, 21 (2): 125-134.

Central Statistics Office. (March 2011a). *Live Register: March 2010*. Cork: Central Statistics Office.

Central Statistics Office. (2011b). *Quarterly National Household Survey: Quarter 4 2010*. Cork: Central Statistics Office.

Central Statistics Office. (2010). *Quarterly National Household Survey: Quarter 1 2010*. Cork: Central Statistics Office.

Dietrich, H. and C. Kleinert. (2004). "Reemployment – but What Kind of Job? Job Prospects of Young Unemployed", Paper to the European Network on Transitions in Youth Annual Workshop, Nuremberg, 2-4 September.

Gangl, M. (2001). "European Patterns of Labour Market Entry: A Dichotomy o Occupationalized vs. Non-Occupationalized Systems? *European Societies* 3 (4): 471-494.

Harris, M.N. (1996). "Modelling the Probability of Youth Unemployment in Australia", *Economic Record*, 72 (217): 118-129.

Isengard, B. (2003). "Youth Unemployment: Individual Risk Factors and Institutional Determinants. A Case Study of Germany and the United Kingdom", *Journal of Youth Studies*, 6 (4): 357-376.

Jimeno, J.F. and D. Rodriguez-Palenzuela. (2002). "Youth Unemployment in the OECD: Demographic Shifts, Labour Market Institutions, and Macroeconomic Shocks", *European Central Bank Working Paper Series*, Working Paper No. 155.

Livanos, I. (2007). "The Incidence of Long-Term Unemployment: Evidence from Greece", *Applied Economics Letters*, 14 (6): 405-408.

Malmberg-Heimonen, I. and I. Julkunen. (2006). "Out of Unemployment? A Comparative Analysis of the Risks and Opportunities Longer-Term Unemployment Immigrant Youth Face when Entering the Labour Market", *Journal of Youth Studies*, 9 (5): 575-592.

Martin, J.P. (2000). "What Works Among Active Labour Market Policies: Evidence From OECD Countries' Experiences", *OECD Economic Studies, No. 30, 2000-1*. OECD: Paris.

McVicar, D., and M. Anyadike-Danes. (2002). "Predicting Successful and Unsuccessful Transitions from School to Work by Using Sequence Methods", , 165 (2): 317-334.

Müller, W. and M. Gangl (2003). Transitions from Education to Work in Europe: The Integration of Youth into EU Labour Markets. Oxford: Oxford University Press.

Obben, J., H-J. Engelbrecht and V.W. Thompson. (2002). "A Logit Model of the Incidence of Long-Term Unemployment", *Applied Economics Letters*, 9 (1): 43-46.

O'Connell, P.J., S. McGuinness and E. Kelly. (2010). "A Statistical Profiling Model of Long-Term Unemployment Risk in Ireland", ESRI Working Paper No. 345.

OECD. (2009a). "The Jobs Crisis: What are the Implications for Employment and Social Policy", *OECD Labour and Employment Ministerial Meeting* (28-29 September 2009). Paris: OECD Publishing.

OECD. (2009b). "Helping Youth to Get a Firm Foothold in the Labour Market", *OECD Labour and Employment Ministerial Meeting* (28-29 September 2009). Paris: OECD Publishing.

OECD. (2005). From Education to Work: A Difficult Transition for Young Adults with Low Levels of Education. Paris: OECD Publishing.

OECD. (2003). "Unemployment Risk Factors in Estonia, Latvia and Lithuania" http://www.oecd.org/dataoecd/28/55/2493996.pdf. Paris: OECD Publishing.

Quintini, G. and S. Martin. (2006). "Starting Well or Losing their Way? The Position of Youth in the Labour Market in OECD Countries", *OECD Social, Employment and Migration Working Papers,* No. 39. Paris: OECD Publishing.

Russell, H. and P.J. O'Connell. (2001). "Getting a Job in Europe: The Transition from Unemployment to Work Among Young People in Nine European Countries", *Work, Employment and Society*, 15 (1): 1-24.

Ryan, P. (2001). “The School-to-Work Transition: A Cross-National Perspective”, *Journal of Economic Literature*, 39 (1): 34-92.

Scarpetta, S., A. Sonnett and T. Manfredi. (2010). “Rising Youth Unemployment During the Crisis: How to Prevent Negative Long-term Consequences on a Generation?” *OECD Social, Employment and Migration Working Papers*, No. 106. Paris: OECD Publishing.

Shavit, Y. and W. Müller. (1998). From School to Work; A Comparative Study of Educational Qualifications and Occupational Destinations. Oxford: Clarendon Press Oxford.

Smyth, E. (2008). “Just a Phase? Youth Unemployment in the Republic of Ireland”, *Journal of Youth Studies*, 11 (3): 313-329.

Thapa, P.J. (2004). “On the Risk of Unemployment: A Comparative Assessment of the Labour Market Success of Migrants in Australia”, *Australian Journal of Labour Economics*, 7 (2): 199-229.

Vanoverberghe, J., D. Verhaest, E. Verhofstadt, E. Omey. (2008). “The Transition from School to Work in Flanders: A Duration Analysis”, *Journal of Education and Work*, 21 (4): 317-331.

Verhofstadt, E. and C. Göbel. (2006). “The Effect of Temporary Employment in the Transition from School to a Permanent Job”, Paper to the European Network on Transitions in Youth Annual Workshop, Marseilles, 7-9 September.

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