

IZA Policy Paper No. 103

Youth Unemployment

Niall O'Higgins

June 2015

Youth Unemployment

Niall O'Higgins

*ILO Geneva, University of Salerno
and IZA*

Policy Paper No. 103
June 2015

IZA

P.O. Box 7240
53072 Bonn
Germany

Phone: +49-228-3894-0

Fax: +49-228-3894-180

E-mail: iza@iza.org

The IZA Policy Paper Series publishes work by IZA staff and network members with immediate relevance for policymakers. Any opinions and views on policy expressed are those of the author(s). IZA takes no institutional policy positions. The IZA research network is committed to the IZA Guiding Principles of Research Integrity.

The Institute for the Study of Labor (IZA) in Bonn is a local and virtual international research center and a place of communication between science, politics and business. IZA is an independent nonprofit organization supported by Deutsche Post Foundation.

The papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the corresponding author.

ABSTRACT

Youth Unemployment^{*}

It's a pretty tough time to be a young European seeking to enter the labour market, but what exactly is the nature of the problem facing young people trying to find employment? It has long been recognized that unemployment is associated with a series of negative health consequences, both physical and psychological which tend to grow disproportionately with the duration of unemployment. Unemployment is also associated with unhappiness – both for those experiencing it as well as those who are employed but fear unemployment in a time of high job insecurity and it is widely understood that unhappiness is of itself linked to mental and physical ill-health. There is also a substantial body of evidence which links youth unemployment (and non-employment) to crime. Not only is crime costly for society it is also costly for the individual. Moreover, any such effects are likely to have long-term consequences; once a path of marginalization and criminality has been embarked upon, one's future prospects (and expectations) are likely to adjust accordingly. Thus, unemployment is bad for young people and for society as a whole; however, equally important, the detrimental consequences of youth unemployment are largely associated with longer term unemployment rather than unemployment per se. It is here that the really harmful effects of the recession have been felt by young people. During the recession, the prevalence of long-term unemployment amongst the young increased by more than one third. Moreover, this is not the only recent negative trend in young people's labour market experience with longer term consequences. In recent years, there has been increasing recognition that joblessness – or NEET – as it is now usually called, and not just unemployment per se is an issue for concern. Similarly, the emergence of high levels of temporary and part-time employment amongst young people and the longer term impacts of these contractual forms is also becoming a significant issue. This paper looks at recent trends in youth unemployment and joblessness and seeks to clarify some issues related to the nature of the youth labour market 'problem'.

JEL Classification: J13, J64, J81, I28

Keywords: youth labour markets, youth unemployment, NEET

Corresponding author:

Niall O'Higgins
Department of Economics and Statistics
University of Salerno
Via Ponte don Melillo
84084 Fisciano (SA)
Italy
E-mail: nohiggins@unisa.it

^{*} Forthcoming in: Andy Furlong (ed.), *Routledge Handbook of Youth and Young Adulthood*.

1. Introduction

It's a pretty tough time to be a young European seeking to enter the labour market, but what exactly is the nature of the problem facing young people trying to find employment? It is regularly and reasonably argued that young people have been particularly hard hit by the recession; less reasonably, however, this assertion is often based on the changes which have occurred in youth unemployment rates. Labour market experiences, including spells of unemployment, early on in a person's working life are likely to have repercussions which will be felt throughout their adulthood (O'Higgins, 2001). It has long been recognised that unemployment is associated with a series of negative health consequences, both physical and psychological which tend to grow disproportionately with the duration of unemployment¹. Unemployment is also associated with unhappiness – both for those experiencing it as well as those who are employed but fear unemployment in a time of high job insecurity and it is widely understood that unhappiness is of itself linked to mental and physical ill-health (Bell and Blanchflower, 2010). There is also a substantial body of evidence which links youth unemployment (and non-employment) to crime². Not only is crime costly for society it is also costly for the individual. Moreover, any such effects are likely to have long-term consequences; once a path of marginalization and criminality has been embarked upon, one's future prospects (and expectations) are likely to adjust accordingly. Thus, unemployment is bad for young people and for society as a whole; however, equally important, the detrimental consequences of youth unemployment are largely associated with longer term unemployment rather than unemployment per se. It is here that the really harmful effects of the recession have been felt by young people. During the recession, the prevalence of long-term unemployment amongst the young increased by more than one third. Moreover, this is not the only recent negative trend in young people's labour market experience with longer term consequences. In recent years, there has been increasing recognition that joblessness – or NEET – as it is now usually called, and not just unemployment per se is an issue for concern. Similarly, the emergence of high levels of temporary and part-time employment amongst young people and the longer term impacts of these contractual forms - are also becoming significant issues. This chapter looks at recent trends in youth unemployment and joblessness and seeks to clarify some issues related to the nature of the youth labour market 'problem'.

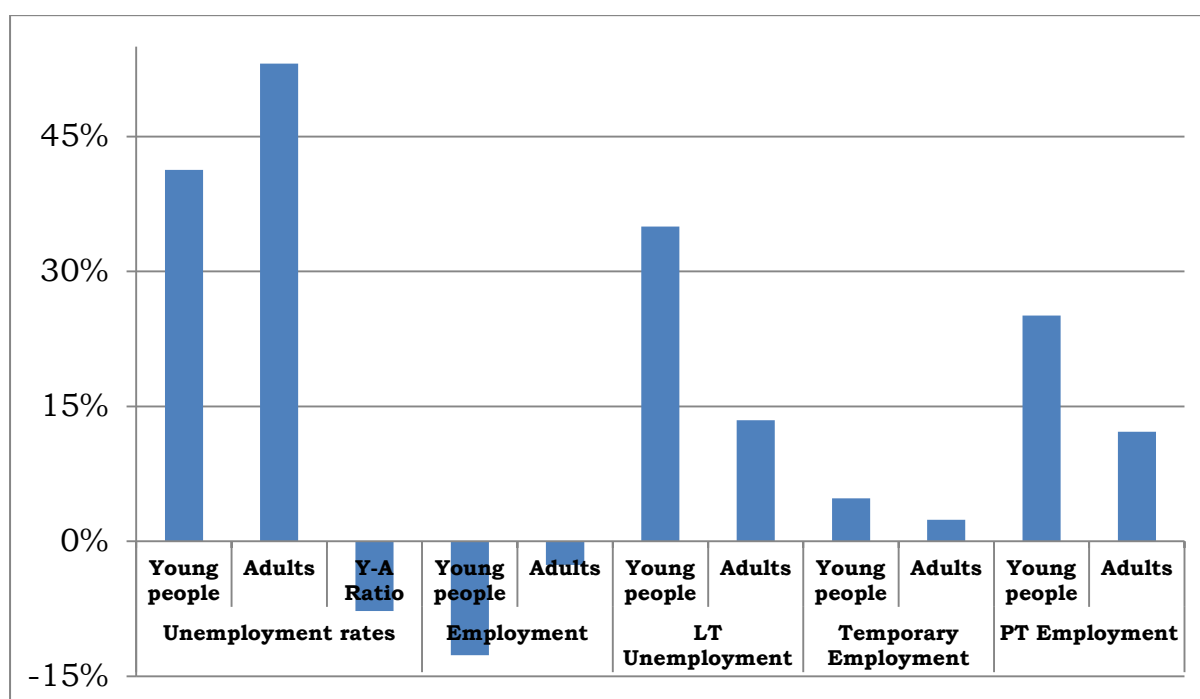
¹ See Bell & Blanchflower (2010) and, in particular, the references cited therein.

² See, for example, Fougere et al. (2009) on France.

2. Recent trends

First, it's worth reiterating that although youth unemployment rates increased significantly during the recession, the main way in which young people may be said to have suffered disproportionately is not directly related to unemployment rates *per se*. Figure 1 illustrates the percentage change in the major labour market indicators for young people (and between 2007 and 2014). Over this period the youth (aged between 15 and 24) unemployment rate in the EU increased by 41%, whilst the 'prime-age' adult (aged between 25 and 49) rate in the EU increased by 53% (figure 1)³.

Figure 1: Percentage changes in labour market indicators for young people (15-24) and Adults (25-49) in the EU28, 2007-2014



Source: Calculated from Eurostat data (<http://epp.eurostat.ec.europa.eu/>).

Notes: 1) The figure reports the percentage change for each indicator;

2) Y-A ratio = ratio of youth unemployment rates to adult unemployment rates, L-T = long-term unemployment (over one year);

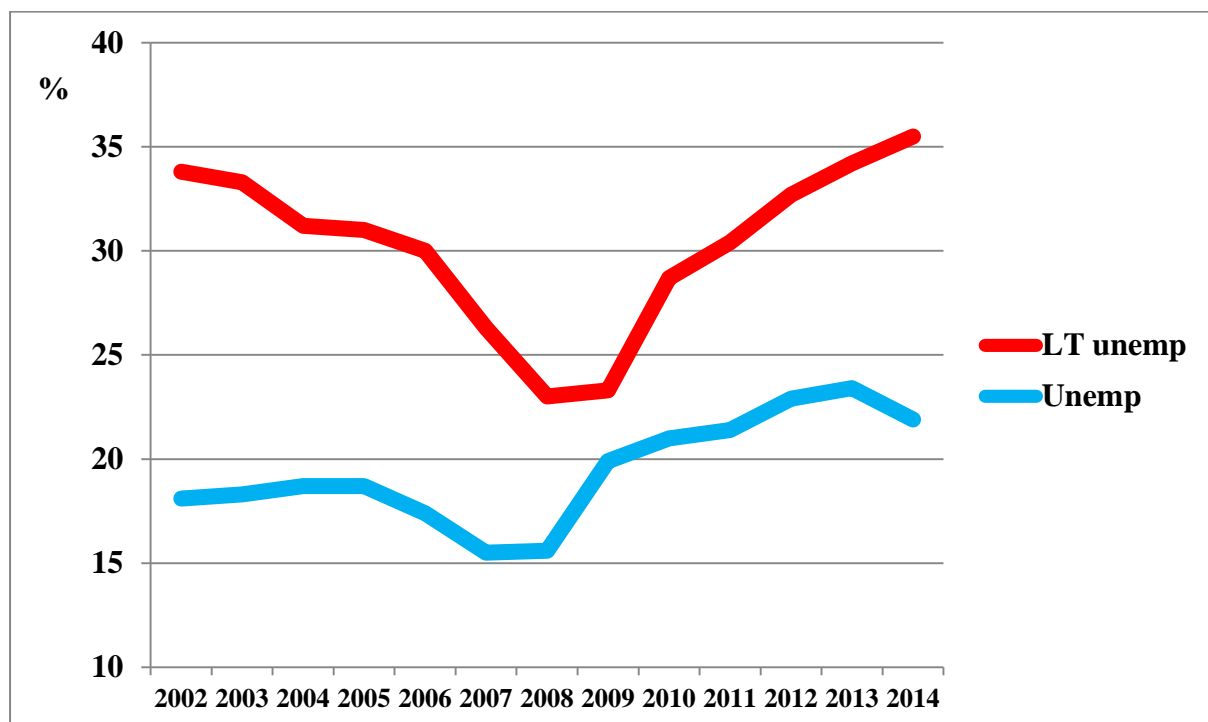
3) the final three bars on the right report the percentage change in the prevalence of the phenomena calculated as a percentage of the young unemployed (for long-term unemployment) or young employees (temporary and part-time employment).

³ All the figures and calculations reported here are based on the Eurostat database.

Consequently, the ratio of youth/adult unemployment rates actually fell over the same period. True the percentage **point** increase in youth unemployment rates (6.4 percentage points) was nearly double that of prime-age adults (3.4 percentage points) but this simply reflects the tendency for unemployment rates to be higher for young people than adults irrespective of the state of the economy. The reasons for this are well known and will not be entered into here⁴, but the obvious consequence is that a given **percentage point variation** will correspond to a much smaller **percentage variation** for young people than for adults – thus the percentage point variations are likely to be higher for young people than adults as a consequence of both positive and negative demand shocks.

On the other hand, the prevalence of long-term unemployment⁵ amongst young people increased by 35% (compared to an increase of 13.5% for adults); youth employment fell by over 13% (compared to a fall of 3% for adults); and, the prevalence of temporary and especially part-time employment amongst young people also increased more than for adults.

Figure 2: Youth unemployment rates and the prevalence of long-term unemployment amongst young people 2002-2014



Source: Calculated from Eurostat data (<http://epp.eurostat.ec.europa.eu/>).

Note: The prevalence of youth long-term unemployment is calculated as a percentage of the young unemployed.

⁴ See, for example, O’Higgins (2001) and/or Ryan (2001) for a discussion.

⁵ The prevalence of long-term unemployment is defined here as the percentage of the unemployed of a specific age-group who have been unemployed for one year or more.

None of these changes can have been particularly welcome to young people, however, the increase in long-term unemployment is of particular concern; following a period in which it had been persistently albeit gradually falling amongst young people, the recession precipitated a rapid and sustained growth in the indicator (figure 2). The EU wide youth unemployment rate, following a big jump between 2008 and 2009, has since leveled off, and in 2014 actually fell. The prevalence of long-term unemployment, however, grew at a much faster rate during the recession and continues to grow even as youth unemployment starts to recover.

A number of papers over the years have noted that the effects of unemployment and/or joblessness early on in one's 'working' career are likely to have long-term effects on employment prospects and wages (e.g. Gregg, 2001, and Gregg and Tominey, 2005).⁶ The regularity with which such scarring has been found as well as more recent attempts to control for selectivity effects suggest that there really is a scarring effect that goes beyond unobserved individual heterogeneity (e.g. Cockx and Picchio, 2013). The implication is that extended difficulties in the search for work early on are likely to have long-term negative consequences⁷. In the context of the current prolonged recession, this creates the spectre of a lost generation of young people who become permanently excluded from productive employment (Scarpetta et al., 2010). This is a real problem; and one which has prompted the recent resurgence of interest in youth guarantee schemes in the EU.

This overall picture conceals much cross-country variation. For example, between 2007 and 2013 the prevalence of long-term unemployment amongst the young unemployed almost quadrupled in Spain, almost tripled in Latvia and nearly doubled in Ireland and the UK, whilst it actually fell in six EU countries, most notably in Germany where the reduction was almost 30%. Unemployment and long-term unemployment are of course also not spread evenly across young people displaying different characteristics. For example, in the UK in 2014, the unemployment rate was 16% for young (16-24 year old) 'whites', 25% for young Asians and 32% for young 'blacks' - twice the rate for young 'whites'⁸. Unemployment also tends to be concentrated amongst the less educated in the EU. In 2013, at 29% the

⁶ The cited paper provides perhaps the strongest case for duration dependence, looking at the effects of early unemployment on career prospects some ten-fifteen years later, controlling for observed heterogeneity.

⁷ Gregg & Tominey (2005) identify a scarring effect on wages more than twenty years after unemployment episodes experienced during youth.

⁸ The designation 'White', 'Asian' and 'Black' are those used in the briefing note from which the figures were taken (Dar & Mirza-Davies, 2015). Labour force statistics on ethnic minorities (as opposed to immigrants) are not routinely reported (yet) by EUROSTAT.

unemployment rates of young adults⁹ (25-29) with lower secondary education or less was over double that of young adults with secondary (13%) or tertiary education (11%).

Although the average increase of 5% in the prevalence of temporary employment amongst young people across the EU is rather moderate, this too hides substantial cross-country variation. For example, in Italy the recession has reinforced an ongoing trend in increasing ‘flexibility at the margin’ initiated with major labour market reforms in 1997 and 2003; during the recession, the prevalence of temporary employment amongst young people increased by so 32% in Italy, so that now temporary employment forms account for well over half all employment contracts of young people (56% in 2014) and practically all new youth employment contracts (O’Higgins, 2011). Also, the prevalence of part-time employment amongst the young employed rose significantly, by 25% in the EU and by 62% in Italy, between 2007 and 2014. Clearly a significant part of the fall in aggregate labour demand translated into reduced working time for the young.

3. Does the (long-term) Unemployment Rate capture the problem?

A more general issue concerns the nature of the indicator(s) we should be looking at in order to encapsulate youth labour market entry problems. In recent years, concern has begun to be expressed about discouraged young people who are not unemployed using standard definitions, that is young people who, other things being equal, would like to work – or would have liked to have work – but are not actively looking for a job; the discouraged in other words. Hence attention has begun to be focused on the so-called NEET¹⁰.

In order to be classified as unemployed, one needs to be without work; available to work; and, actively searching for a job (ICLS, 1982). The NEET (Not in Employment, Education or Training), on the other hand are simply those who are neither working nor in education or training – hence the acronym. There are a number of advantages of this statistic

⁹ Since a substantial proportion of young people as traditionally defined (15-24) are still in education, particularly if they are proceeding to upper secondary and tertiary education, the unemployment rates of this age-group by education will give a misleading interpretation. Even for young adults, the unemployment rates may be misleadingly high for tertiary graduates, however, the figures serve to make the basic point. See, *inter alia*, O’Higgins (2010, p. 23) for a discussion.

¹⁰ Several of us have been expressing concern about this group for some years – decades even – however, the adoption of the term NEET by the OECD and its discovery by the European Commission seems to have thrust the term to prominence. See, for example, Eurofound (2012).

in addition to its simplicity, which may be illucidated by stating the formulae for the unemployment and NEET rates explicitly:

$$\text{Youth Unemployment Rate} \equiv \frac{\text{no. of young people who are unemployed}}{\text{no. of young people in the labour market}} \quad (1)$$

$$\text{Youth NEET Rate} \equiv \frac{\text{no. of young people who are not employed or in education}}{\text{no. of young people}} \quad (2)$$

Self-evidently, the indicators differ in both the numerators and the denominators of the expressions; both numerator and denominator are larger in the case of the NEET rate¹¹. All those who are unemployed are by definition not in education or employment, but the latter also includes those not seeking work. Similarly not all young people participate in the labour market as traditionally defined either because they participate in education or for some other reason do not actively search for work. The consequence is that the NEET rate may be bigger (or smaller) than the unemployment rate according to whether the proportion of the **inactive** population, as traditionally defined, which is not participating in education is greater (or less than) the proportion of the **active** population who are unemployed¹². In other words, other things being equal, the higher the educational participation rate, the lower will be the NEET rate *vis-à-vis* the unemployment rate.

If U is the no. of unemployed young people, N the number of employed (young people)¹³, E the number of young people in education, D the number of “discouraged” (young) people neither in employment, ILO unemployment or education and P is the (youth) population, two equivalent expressions for the (youth) unemployment rate, u, are:

¹¹ Strictly speaking, the numerator and denominator respectively of the NEET rate are actually “greater than or equal to” those of the youth unemployment rate, however, for them to be equal, all those not in employment would have to actively seeking work and no young people would be participating in education, conditions which will never be satisfied in practice.

¹² It is a matter of elementary algebra that, $\frac{a+b}{c+d} > \frac{a}{c} \Leftrightarrow \frac{b}{d} > \frac{a}{c}$. If a stands for the unemployed, b the number of those who are neither employed, (ILO) unemployed, or in education, c the size of the labour force, and d stands for the population not in the labour force, then we have the condition stated in the text.

¹³ I use parentheses here since these formulas are obviously valid for any group of people, or indeed for the economy as a whole.

$$u = \frac{U}{U + N} \quad (1')$$

and since $P = N + U + D + E$

$$u = \frac{U}{P - E - D} \quad (1'')$$

Similarly two equivalent expressions for the NEET (or jobless) rate, j , are:

$$j = \frac{U + D}{P} \quad (2')$$

$$j = \frac{P - N - E}{P} = 1 - n - e \quad (2'')$$

where j is the jobless rate, n the employment rate and e the educational participation rate of young people. Assuming that the youth population is exogenously given, then - from (2'') - the youth jobless rate will fall (rise) if the proportion of young people in either employment or education rises (falls). On the other hand, - from (1'') - the unemployment rate will **increase** if, *ceteris paribus*, participation in education increases, but as with the jobless rate, from (1') will fall if employment increases. Hence, for example, an increase in educational participation arising from a movement from employment to education will cause an increase in the unemployment rate. Simply stated, using the unemployment rate, an improvement in a 'good' indicator - the educational participation rate - can produce a worsening of a 'bad' indicator - the youth unemployment rate. For the jobless rate, improvements in either of the 'good' indicators, educational participation and the employment rate, improve (i.e. reduce) the bad indicator, the jobless rate.

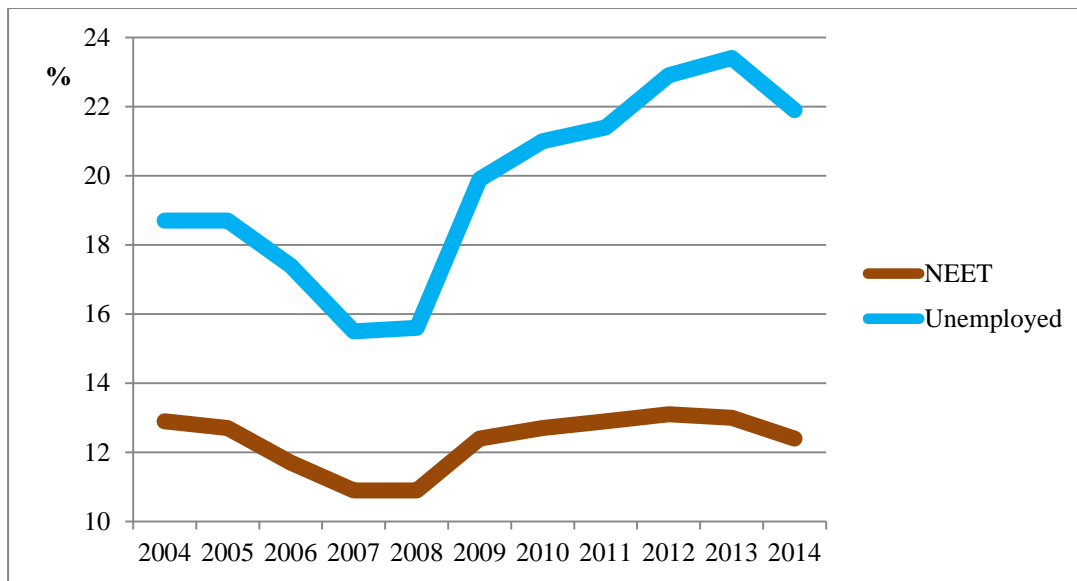
More generally, the NEET rate has several advantages over the unemployment rate, such as:

1. The youth unemployment rate does not necessarily give much idea of the extent of youth labour markets problems as they affect young people as a whole - if most young

people participate in education more or less until age 24, but most of those who do enter the labour market are unemployed, the youth unemployment rate will be very high but it will reflect a relatively small problem in terms of proportion of young people in a particular country (or other geographical area).

2. The unemployment rate implies a rather restricted definition of the labour market – youth unemployment does not include those people who would like to work but do not seek it because they know or believe that no suitable work is available: the discouraged. In the context of a recession, this issue becomes of major importance. Discouragement from the labour market is not independent of economic – or personal – circumstances. People may stop seeking work because they know – or believe – that no appropriate employment is available. Once thus excluded, they disappear from the statistics but also become part – or risk becoming part of a permanently excluded – and disaffected, or perhaps worse, apathetic – group.
3. And, what of those who, given current labour market conditions, choose to do ‘other things’? For example, have and/or look after children, enjoy ‘leisure’ or travel (or indeed migrate to other countries), or participate in education. For most, the choice to do ‘other things’ is unlikely to be independent of the quantity (and quality) of the work available. If one takes a School-to-Work perspective by which education and employment are, respectively, the desirable start and endpoints of the transition in young people’s lives, then the issue of whether they are actually seeking work may not be the key issue.
4. All those young people who are not usefully occupied – in some way or other - represent a missed opportunity – a wasted potential from the individual’s, but also society’s, point of view. Given the particular problems associated with employment services to reach those individuals who have effectively stopped looking for work – the discouraged; and the tendency for such people, once excluded from the labour market, to remain so – there is a strong argument in paying particular attention precisely to that group of young people who are neither unemployed, as traditionally defined, nor in employment, education or training.

Figure 3: Youth Unemployment and NEET rates in Europe, 2004-2014



Source: Calculated from Eurostat data (<http://epp.eurostat.ec.europa.eu/>).

Much depends on what the specific purpose for and/or focus of this distinction. What do we need to know about? If the one wishes to understand better the causes of unemployment over time, or even across (broadly) homogeneous countries, then in fact the choice may not be of great significance. Figure 3 shows youth (15-24) unemployment and NEET rates between 2004 and 2014 in the EU. One can immediately see that – in contrast to the comparison in figure 2 above - the two rates track each other rather closely. True, the NEET rate is consistently well below the unemployment rate¹⁴; the main point however, is that changes in the one mirror changes in the other. The NEET rate increases (falls) when the unemployment rate increases (falls). Indeed, the correlation coefficient between the two over time (2004-14) is 0.86. Looking across countries, it not surprising – given the greater institutional diversity observable across countries as opposed to across time, the correlation (in 2014) is ‘only’ 0.76; this is still rather high, and suggests that for aggregate time-series, cross-country or indeed panel analyses, the choice between the two indicators may not be of central importance.

On the other hand, if we wish to look at individual experiences and, in particular, design policies and programmes which seek to ameliorate difficulties in the pathways of

¹⁴ This is inter alia a consequence of specific (and successful) policy efforts to reduce early school leaving and promote educational attainment which were an integral part of the Lisbon strategy. This has led to a situation in which the number of young people not in education as a percentage of those not in the labour force is smaller than the unemployment rate. As was noted above, this is a necessary and sufficient condition for the unemployment rate to be higher than the NEET rate.

young people then the picture changes rather drastically. In the first place, the issue arises as to which young people we should be concerned with or who deserve greatest attention. Typically, for example, labour force participation rises rapidly with education level. This is of course particularly pronounced in some countries and for some ‘types’ of young person. In North Africa and the Middle East, labour force participation rates are relatively low amongst, above-all, young women, however, they rise rapidly by level of education. Thus, for example, in Tunisia, the NEET are heavily concentrated amongst those with little or no education – over 80% of rural and nearly 60% of urban young (15-29) NEETs have not attained at least secondary education. On the other hand, unemployment rates are much higher amongst the more educated young – particularly those with tertiary education (World Bank, 2014). Also within the EU a broadly similar albeit less extreme pattern is observable; the NEET rate amongst 25-29 year olds with less than secondary education was 33% in 2013 whilst it was 9% for those with at least secondary education. One will observe that the NEET rate is almost four times as high for less educated young adults than it is for those with at least secondary education; for unemployment is was ‘only’ (over) twice as high. Again, this distinction is attributable to the lower labour force participation rates of less educated young people, in other words, the greater tendency for young people with lower levels of education to disappear from the labour force as traditionally defined when not employed¹⁵.

In the face of the recent upsurge in interest in NEET as opposed to unemployment as the appropriate concept to characterize the labour market problems of young people, there have been a number of voices urging caution in the use of the indicator (Furlong, 2006; Elder, 2015); certainly it is true that within the ranks of the NEET there are a number of different ‘types’ of young person whose presence in that state depend on a variety of factors – the unemployed, the discouraged but also, as noted above, others who, given existing opportunities, prefer to do other things. Lumping them together as if they were a homogeneous group may not be all that useful. Rather than see unemployment and NEET rates as mutually exclusive alternative ways of representing The Youth Labour Market

¹⁵ One may observe in passing that for the least educated young people, the NEET rate is larger than the unemployment rate, as noted above this arises because of the much smaller propensity amongst the ‘inactive’ in this group to participate in some form of education or training compared to those with higher levels of education.

Problem¹⁶, however, it is perhaps preferable to use both indicators in order to enrich our understanding on what is going on in the youth labour market.

4. The Causes of Youth Unemployment

A substantial literature analysing the causes of youth unemployment began to proliferate in the 1980s¹⁷. Studies varied much in focus and methodology, however, they are united by one result. Analyses have been unanimous in finding a major role for aggregate demand in determining youth labour market outcomes in general, and youth unemployment in particular, whether emphasized in their conclusions or not. For other contributory factors the findings are more heterogeneous. Early on, it was felt that overly high relative youth wages might be playing an important role, however, the evidence did not strongly support this idea; and, on the rare occasions where a statistically significant impact of relative wages was found, this was nowhere near as important as aggregate demand as a determinant¹⁸.

More recently, the focus has shifted towards the role of labour market institutions as determinants of youth unemployment, amongst which one finds a number of studies looking at the role of minimum wages. The comprehensive review undertaken by Neumark and Wascher (2007) reports estimates of the teenage employment elasticity with respect to the minimum wage which range from below -1 to above 0. The authors conclude overall that the existing evidence points towards negative employment effects of minimum wages for young people. Of 102 studies considered, nearly two-thirds found negative albeit often not statistically significant employment effects of minimum wages, whilst only eight found ‘convincing’ positive effects. More recently, Allegretto et al. (2011) and Dube et al. (2010) have argued that the typical methodologies employed to identify minimum wage effects are downward biased because they ignore unobserved heterogeneity which, once controlled for

¹⁶ Particularly when the NEET rate is mis-defined or mis-interpreted; one common such misapprehension is the exclusion of the unemployed from the NEET (Elder, 2015). This is simply mistaken. There is nothing particularly mysterious or complex about the definition which is directly implied by the name “Not in Employment, Education and Training”. Indeed, the concept is much simpler and, in principle, easier to apply than unemployment – another widely misunderstood concept.

¹⁷ Significant early examples here are Clark & Summers (1982) on the USA and Rice (1986) on the UK.

¹⁸ See, for example, Makeham (1980), Layard (1982), Lynch & Richardson (1982), Wells (1983), Hutchinson et al. (1984),

Rice (1986) and Junankar & Neale (1987) on Britain. More generally the problem was analysed by contributions to Freeman & Wise (1982).

produces no negative employment effect of minimum wages on young people¹⁹. In any event, an emphasis on demonstrating that the effects are generally negative rather than positive rather misses the central point which is that the effects of minimum wages in the vast majority of cases are found to be small. In this sense, these results are in line with the review of evidence presented in O'Higgins (2001, chapter 6) which found small or zero (i.e. not statistically significant) employment effects of minimum wages for young people²⁰.

Neumark and Wascher (2004) and Boockmann (2010) also find that the effects of minimum wages vary considerably according to the existence and form of other labour market institutions (employment protection legislation, active labour market policies and so on); the former find that the negative effects of minimum wages are most pronounced in unregulated labour markets, whilst the latter finds that more generous unemployment benefits reduce any negative employment effects of minimum wages as does, albeit to a lesser extent, centralised collective bargaining²¹.

Turning to other labour market institutions, Jimeno and Rodriguez-Palenzuela (2002) and Bertola et al. (2007) find a role for unionization rates in reducing youth employment; the former attribute this to wage compression, whilst the latter argue rather more convincingly that unions bargain to protect their core members, prime age males, and are more willing to accept employment losses amongst more peripheral groups such as young people and women. Neither study finds a significant role for Employment Protection Legislation (EPL) per se. The comprehensive study of the role of institutions on employment patterns undertaken by Bassanini and Duval (2006), on the other hand, find a role for EPL in depressing youth employment rates, but, in contrast to Jimeno and Rodriguez-Palenzuela (2002), they also find a positive impact of youth minimum wages on youth employment.

¹⁹ Defending their own – or rather their peer's - corner, Neumark & Wascher (2013) have recently argued that the approach of these two papers essentially take **too much** account of heterogeneity hence leading to insignificant coefficients.

²⁰ Similar findings are reported also by Kolev and Saget (2005).

²¹ Boockmann's finding also contradict those of Neumark & Wascher (2004) in that he finds that stonger EPL increase the negative impact of minimum wages. He suggests that a possible explanation lies in a difference between short and long-run complementarities - or not - between EPL and MW. Neumark & Wascher (2004) are concerned with short-run effects where it is plausible that EPL impede the operation of negative employment effects of minimum wages, whilst the studies considered by Boockmann (2010) cover both short and long-run effects in which case any EPL based obstacles to firing are weaker.

In the context of the current recession, a number of papers have started to look at the role of recessions, as opposed to fluctuations in aggregate demand per se, in determining aggregate and/or youth labour market outcomes. Choudhry et al. (2012) find a consistently positive impact of financial crises on youth unemployment over and above that attributable to variations in aggregate demand whilst Bernal-Verdugo et al. (2012) find inter alia that more flexible labour markets tend to exacerbate the initial negative employment effects of financial crises but that the negative effects of crises last longer in countries with more protected labour markets, particularly so in the case of youth labour markets. Analysing the recent recession, O'Higgins (2012) found that the aggregate demand induced youth employment loss arising from the recession was reduced in countries with stronger not weaker employment protection legislation. Moreover, the analysis of country-specific coefficients in rolling regressions for the period prior to the recession further suggested that the strong negative adjustment of youth employment prompted by the recession in countries with relatively flexible labour markets was not counterbalanced by a strong positive adjustment of youth employment to the growth in aggregate labour demand in the period of expansion prior to the downturn. More recently, O'Higgins (2014) has pointed to a slightly more nuanced picture looking at the elasticity inter alia of youth unemployment with respect to GDP allowing the effect to vary across time and institutional context. The countries where young people suffered least in terms of unemployment (and other labour market outcomes) were the 'Education-based' systems comprising Scandinavian and Continental European countries characterised by low numerical (i.e. where it is hard to fire workers) and wage flexibility and high functional (i.e. where the workforce can easily adapt to structural change) flexibility. The countries where young people fared the worst were the Anglo-Saxon countries characterised by high numerical and wage flexibility, but only intermediate functional flexibility. In the Mediterranean countries with low flexibility on all counts, however,

atypical employment forms were very responsive to variations in GDP indicating that these forms were used as to adjust to variations in labour demand. Certainly the evidence supporting the idea that making labour markets more flexible will facilitate the entry of young people into stable employment is firmly refuted by this evidence.

5. What to do about it?

Much has been written on the appropriate response to high youth unemployment. From the foregoing, it should be clear that any policy to promote youth employment needs to be based around economic policies which promote economic and employment growth in general. Secondly, the evidence suggests that simply making the labour market more ‘flexible’ by relaxing employment protection legislation is not likely to resolve youth employment problems per se. Perhaps the worst approach – adopted by the Mediterranean countries in general and Italy in particular in the two decades following 1995 was to introduce flexibility at the margin, thereby strengthening labour market segmentation rather than facilitating the entry of young people into stable employment.

On the other hand, education and training policy can do much to ease youth labour market entry seen from a long-term perspective. Appropriately designed policies raising the educational levels of young people are likely to raise economic growth²², and clearly do, at the individual level, increase the chances of finding work and the earnings of those in employment.

Regarding labour market based measures, an enormous number of primarily microeconomic evaluations of the impact of Active Labour Market Programmes (ALMPs) have also been undertaken²³. There are a number of regularities in the findings of these studies, although a growing literature has increasingly given rise to conflicting results or, at

²² The large body of evidence goes well beyond the scope of this chapter. It is worth noting also that although there is much evidence supporting the positive causal association between education and economic growth (e.g. Sianesi & Van Reenan, 2003), the link has been questioned by some; increasingly so in recent years. A recent meta-analysis suggests that the relationship is not as clear-cut as was previously believed with a strong publication bias underlying many of the positive estimates (Benos & Zotou, 2014).

²³ There are correspondingly a number of overviews and meta-analyses which summarise the findings in one way or another. These include, Betcherman et al. (2004), Betcherman et al. (2007), Card et al. (2010), Fay (1996), Grubb & Ryan (1999), Heckman et al. (1999), Kluve (2010), Martin & Grubb (2001) and Quintini & Martin (2006).

least, a greater ambiguity as to the role played by different factors. Some of the main findings of the evaluation literature are summarised here:

Programme type:

- *Comprehensive interventions* – Comprehensive programmes involve some combination of subsidized employment, training, self-employment support, guidance and counselling and so on. They have a long history in OECD countries and above all in the United States where experiences are mixed to say the least. In Europe, however, as well as in Latin America such programmes have achieved substantial success. For example, the United Kingdom’s New Deal for Young People has proved to be an extremely cost effective programme.
- *Job Search Assistance* – Going back to the early study of Fay (1996), measures to improve job search assistance are found to be the most cost effective form of active labour market intervention. Having said this, once again, job search assistance is likely to be of greatest value when there are sufficient jobs available, so the problem is one of matching workers to jobs. In times of recession, this type of intervention is likely to be less effective.
- *Training vs. employment subsidies:* In general programmes which impart some training, especially those based with private employers seems to be more effective. This is one of the more robust findings in the literature, although as noted below, the relative usefulness may depend on the business cycle.
- *On-the-job training* appears to be more effective than *off-the-job training*. This may be connected to the fact that on-the-job training, by its nature involves direct contact with employers.
- *Public vs. Private* – Similar to the above, programmes which involve some form of placement with private employers also appear to work better.

Business Cycle:

- There is general agreement that training programmes appear to be less useful in times of recession, particularly when compared with other forms of programme such as employment subsidies; training programmes perform better when they are instituted during periods of economic expansion (Betcherman et al., 2004 and McVicar & Podivinsky, 2010). The suggestion is that during a recession, more emphasis should be put on employment subsidies and other measures aimed at creating employment and providing income support. This view has been supported also by the analyses of the OECD (2009). Once economies start to return to positive economic growth, then training and other policies (such as appropriate educational policy) may also play a more constructive role in supporting recovery.
- One recent analysis partially contradicts this finding; in his meta-analysis, Kluve (2010)²⁴ finds that ALMPs as a whole work better when unemployment is higher although the marginal effect is fairly small; but, the effect is larger and more statistically significant when attention is restricted to training programmes. On the other hand, the effect disappears (but does not become negative as would be implied by the previous results) when youth programmes are considered on their own. The author's suggested explanation for this surprising result is that in times of recession, the pool of potential candidates for programmes - which, *de facto* or *de iure*, are for the unemployed - will be of a higher average quality. Thus, the author's conclusion is that it is not that programmes are more effective during recessions, but rather that the composition of the unemployed changes and in particular, the average quality of programme participants tends to rise during such periods, leaving the basic conclusion outlined above unchallenged.
- Microeconomic and (meta-analysis) findings have also been complemented by more general macroeconomic studies which tend to support that idea that ALMPs as a

²⁴ An earlier meta-analysis by the same author (Kluve & Schmidt, 2002) found an analogously signed effect of GDP growth, however in this case – and with a smaller sample size – the effect was not statistically significant. Lechner & Wunsch (2009) also find a positive relationship between programme effectiveness and the National unemployment rate in Germany although the relationship disappears when they control for regional (rather than national) unemployment rates. Since it is the local labour market which is likely to have a more direct impact on post-programme outcomes, one wonders how to interpret this result.

whole can mitigate the negative employment effects of a recession (Bassanini & Duval, 2006).

Targetting

- In general, evaluations have found discouraging results as regards their impact on young people. Indeed, one of the central findings of Card et al. (2009) confirms this result. However, the analysis of Betcherman et al. (2007) finds that programmes which target **disadvantaged** youths seem to be more effective. Moreover, a general result from several reviews – going back to the relatively early analysis of Fay (1996) is that targeted programmes are more effective.

Timing of the evaluation

- The meta-analysis undertaken by Card et al. (2009) looks specifically at the timing of evaluations, and finds that this is an important characteristic in determining estimated effects. In particular, over the medium term (2-3 years after programme participation), job-training programmes are found to be particularly successful, and longer duration programmes which appear to be less effective than short programmes when looking at immediate impacts, are found to have significant positive effects in the medium-term.

Social partner involvement

- Although there is little systematic evidence on this question, there is a general consensus that the involvement of social partners is likely to enhance the effectiveness of programmes. Involving the social partners in the formulation and implementation of ALMP is likely to increase the effectiveness of such policies for several reasons. First, the involvement of employers and workers implies a commitment on their part to the success of policies and programmes. This joint commitment, in itself, will tend to enhance the effectiveness of policy.
Second, a related point is that the quality of programmes is likely to be higher if the social partners are involved. Numerous studies have demonstrated that programmes which are more closely linked to private employers are likely to be more effective. Employers may use programmes as a recruitment and/or screening device. Also, the relevance of training is probably greater in the context of private employer

involvement. The skills acquired are likely to be closer to those required by the labour market than those taught on programmes without such direct labour market links.

The involvement of workers' organizations can help avoid some of the pitfalls of work experience and training programmes. In promoting the training content (and, through careful monitoring, ensuring the effective implementation) of programmes, workers' organizations can guard against the exploitation of programme participants, at the same time helping to promote their long-term prospects of good quality employment. They can also ensure that programme participants are not substituted for other categories of worker.

6. Concluding remarks

There are a couple of key and clear findings as regards youth unemployment. First youth unemployment, if protracted, is bad for the people experiencing it and for society; moreover, the negative consequences are strongly associated with the length of time spent in unemployment. Long-term youth unemployment is associated with poorer lifetime job prospects, worse health and greater lifetime unhappiness as well as representing lost output and income for society as a whole. Second, the recent recession has clearly worsened the youth unemployment problem in Europe and elsewhere. This is confirmation – if such were needed – that a key way to reduce youth unemployment is to raise economic growth. However, as regards other areas of investigation, the rapid expansion in the number of studies analysing the causes, consequences and remedies for youth unemployment have not always served to enhance our certainty about which courses of action are to be preferred as regards, for example, which remedial action is appropriate at the individual level; or indeed, which indicator or type of non-employed person we should be concerned with - as in the discussion on NEET vs. unemployment. Here there is room for more subtle and detailed analyses of **why** 'what works' works? In order to understand better the mechanisms through which the entry into stable employment may be facilitated.

Allegretto, Sylvia A., Arindrajit Dube, and Michael Reich. 2011. "Do Minimum Wages Really Reduce Teen Employment? Accounting for Heterogeneity and Selectivity in State Panel Data." *Industrial Relations*, Vol. 50, No. 2, April, pp. 205-240.

Bassanini, A. & R. Duval. 2006. – "Employment Patterns in OECD Countries: Reassessing the Role of Policies and Institutions," OECD Social, Employment and Migration Working papers no. 35, OECD, Paris.

Bell, D. & D. Blanchflower. 2010. *Youth unemployment: Déjà vu?* Discussion Paper no. 4705, IZA: Bonn.

Benos, N. and S. Zotou. 2014. Education and Economic Growth: A Meta-Regression Analysis", *World Development*, 64, 669-689.

Bertola, G, Blau, F.D. and Kahn, L.M. 2007. "Labor market institutions and demographic employment patterns" *Journal of Population Economics* 20(4), 833–67.

Betcherman, G.; Olivas, K.; Dar, A. 2004. "Impacts of active labor market programs: New evidence from evaluations with particular attention to developing and transition countries," Social Protection Discussion Paper no. 0402, World Bank, Washington, D.C..

Betcherman, G.; Godfrey, M.; Puerto, S.; Rother, F.; Stavreska, A. 2007. "Global inventory of interventions to support young workers: Synthesis report," World Bank, Washington, D.C..

Boockmann, B. 2010. "The Combined Employment Effects of Minimum Wages and Labor Market Regulation: A Meta-Analysis," *Applied Economic Quarterly* 56, pp. 156-188.

Card, D., J. Kluve, J. & A. Weber. 2010. "Active labour market policy evaluation: A meta-analysis," *Economic Journal* 120(548), F452–F477.

Choudhry, M., Marelli, E. and Signorelli, M. 2012. "Youth unemployment and the impact of financial crises." *International Journal of Manpower*, 33, 76 - 95.

Cockx, B. and M. Picchio. 2013. "Scarring effects of remaining unemployed for long-term unemployed school-leavers," *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 176(4), 951–980.

Dar A. and J. Mirza-Davies. 2015. "Unemployment by ethnic background," House of Commons, Briefing note SN/EP/6385, 13th March.

Dube, Arindrajit, T. William Lester, and Michael Reich. 2010. "Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties." *Review of Economics and Statistics*, Vol. 92, No. 4, November, pp. 945-64.

Elder, S. 2015. "What does NEETs mean and why is the concept so easily misinterpreted?" Technical note no. 1, YEP, ILO Geneva.

- Eurofound. 2012. *Young people not in employment, education or training: Characteristics, costs and policy responses in Europe*. Eurofound: Dublin.
- Fay, R.G. 1996. "Enhancing the effectiveness of active labour market policies: Evidence from programme evaluations in OECD countries," *Labour Market and Social Policy Occasional Papers* no. 18, OECD: Paris.
- Furlong, A. 2006. "Not a very NEET solution: representing problematic labour market transitions among early school-leavers", in *Work, Employment and Society*, 20(3), 553-69.
- Fougere, D.; Kramarz, F.; Pouget, J. 2009. "Youth unemployment and crime in France," *Journal of the European Economic Association*, 7(5), pp. 909-938.
- Gregg, P. 2001. "The impact of youth unemployment on adult unemployment in the NCDS." *Economic Journal* : F626-E653.
- Gregg, P. & Tominey, E. 2005. "The wage scar from male youth unemployment." *Labour Economics* 12: 487-509.
- Grubb, W.N. & P. Ryan. 1999. *The Roles of Evaluation for Vocational Education and Training: Plain Talk on the Field of Dreams*, ILO: Geneva.
- Heckman, J.J., R.J. LaLonde & J.A. Smith. 1999. 'The economics and econometrics of active labour market programs', in O. Ashenfelter and D. Card (eds), *Handbook of Labor Economics* 3, Elsevier, Amsterdam.
- International Conference of Labour Statisticians (ICLS). 1982. *Resolution concerning statistics of the economically active population, employment, unemployment and underemployment*, adopted by the Thirteenth International Conference of Labour Statisticians, Geneva.
- Jimeno, J.F. & Rodriguez-Palenzuela, D. 2002. "Youth unemployment in the OECD: Demographic shifts, labour market institutions, and macroeconomic shocks." ECB Working paper no. 155, ECB: Frankfurt.
- Kluve, J. 2010. "The effectiveness of European active labor market programs," *Labour Economics*, 17(6), pp. 904-918.
- Kluve, J. & C. M. Schmidt. 2002. "Active policy evaluation: Problems, methods and results," *Economic Policy*, 17(35), pp. 410-448.
- Kolev, A. & C. Saget – 2005 – "Towards a Better Understanding of the Nature, Causes and Consequences of Youth Labor Market Disadvantage: Evidence for South-East Europe," *Social Protection Discussion Paper* no. 0502, World Bank, Washington, D.C.
- Lechner, M. and Wunsch, C. 2009. 'Are training programmes more effective when unemployment is high?' *Journal of Labor Economics* 27(4), pp.653-92.

Martin, J.P. & D. Grubb. 2001. "What works and for whom: A review of OECD countries' experiences with active labour market policies," IFAU Working Paper no. 14, OECD: Paris.

McVicar, D. & J. M. Podivinsky. 2010. "Are Active Labour Market Programmes Least Effective Where They Are Most Needed? The Case of the British New Deal for Young People." Melbourne Institute Working Paper No. 16/10, University of Melbourne: Melbourne.

Neumark, David, and William Wascher. 2004. "Minimum Wages, Labor Market Institutions, and Youth Employment: A Cross-National Analysis." *Industrial and Labor Relations Review*, Vol. 57, No. 2, January, pp. 223-46.

Neumark, David, and William Wascher. 2007. "Minimum Wages and employment," Discussion paper no. 2570, IZA, Bonn.

O'Higgins, N. 2001. *Youth Unemployment and Employment: A Global Perspective*. Geneva: ILO.

O'Higgins, N. 2011. "Italy: Limited policy responses and industrial relations in flux, leading to aggravated inequalities," in Vaughan-Whitehead (ed.) *Inequalities in the world of work: The effects of the crisis*. Edward Elgar: Cheltenham.

O'Higgins, N. 2012. "This Time Its Different? Youth labour markets during 'The Great Recession'", *Comparative Economic Studies*, 54(2), pp. 395-412.

O'Higgins, N. 2014. "Institutions and youth labour markets in Europe during the crisis" in Tridico & Mamica (ed.s) *Economic Policy and the Financial Crisis*, Routledge, Abingdon, 2014.

Quintini, G. & S. Martin. 2006. "Starting Well or Losing Their Way? The Position of Youth in the Labour Market in OECD Countries," Social, Employment and Migration Working papers no. 39, OECD: Paris.

Ryan, P. 2001. "The School-to-Work Transition: A Cross-National Perspective," *Journal of Economic Literature*, Vol. 39, no. 1, pp. 34-92.

Scarpetta, S., Sonnet, A. and Manfredi, T. 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.

Sianesi, B. & J. Van Reenen. 2003. "Returns to Education: Macroeconomics," *Journal of Economic Surveys*, Vol. 17, no. 2, pp. 157-200.

World Bank. 2014. *Tunisia: Breaking the Barriers to Youth Inclusion*, World Bank, Washington D.C..