Balancing Flexibility and Security in Europe?
The Impact of Unemployment on Young Peoples' Subjective Well-being

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This paper examines the relationship between so-called "flexicurity" systems, unemployment and well-being outcomes for young people in Europe. A key tenet of the flexicurity approach is that greater flexibility of labour supply the institutional complementarities that support transitions into employment. In principle, increased employability reduces transition costs, trading longer-term employment stability for short-term job instability. However, there is a risk that young people experience greater job insecurity – objectively and subjectively – induced by less stable contracts and more frequent unemployment spells. Our research draws on data from the European Social Survey (ESS) and uses multi-level models to explore whether and how flexibility-security arrangements moderate the effect of past and present unemployment on well-being of young people. Analytically, we distinguish between flexibility-security institutions that foster greater job prospects and those that provide financial security.

Keywords: subjective well-being, life satisfaction, unemployment, youth, labour market institutions, flexicurity

Corresponding author: Helen Russell, Economic and Social Research Institute, Sir John Rogerson's Quay, Dublin 2, Ireland. Email: Helen.Russell@esri.ie

Introduction

The impact of labour market regulation on overall performance and the integration of labour market participants has been a preoccupation of policy makers and researchers alike for many years (e.g. see Freeman 2005). A key issue has been balancing the security needs of participants with pressures for flexibility driven by volatility and uncertainty. These debates and concerns have driven much policy making in Europe. As new entrants to the labour market with more frequent unstable contracts, young people are more likely to experience periods of unemployment and are less likely to have established adequate contribution histories to benefit from income security (Madsen et al. 2013). There is a significant body of literature which demonstrates that both insecure work and the insecurities of not having work can have negative effects on psychological well-being and physical health, including for young people (Bell and Blanchflower 2011).

The promotion of so-called flexicurity policies by certain European member states – namely Denmark and the Netherlands – and subsequently by the European Commission (2007) was seen as an attempt to redress the imbalance of flexibility and security policies (Wilthagen and Tros 2004; EC 2007). Although young people were not central to the drive to promote flexicurity policy, they had much to gain from addressing – at least in principle – the gap between insiders and outsiders and enhancing security for those most likely to experience unstable employment trajectories. The concept, and application in exemplary countries, relied heavily on the combination of flexibility of contracts and labour market institutions that provided the security and support needed for rapid and well-matched re-entry into employment – namely income security measures and active labour market policies (ALMP) (Viebrock

and Clasen 2009). However, in many European countries there was a greater focus on the flexibility measures, including reductions in employment protection legislation (EPL), with less attention to the security part of the portmanteau (see Burroni and Keune 2011). Furthermore, the crisis and its disproportionate effects on youth and non-standard workers who were the first to lose their jobs, put the concept under pressure and exposed the weaknesses identified by earlier authors (Heyes 2011). Perhaps as a result of this relatively poor performance but also reflecting considerable internal and external change at the EU policy making level the concept has been quietly dropped from policy makers' discourse (Smith et al, 2019). Nevertheless, the key principles of the European Pillar of Social Rights, one of the European Commission's priority areas in support of a "deeper and fairer economic and monetary union" are inspired by flexicurity principles with an important focus on income security.[i] Moreover, the tension between demands for flexibility and security remain central to the subjective and objective experience of labour market participants and their overall well-being, in particular of young people (Smith et al. 2019).

While unemployment spells are common for young people in Europe, the experience of labour market insecurity will be influenced not only by the individual and household context, but also by the institutional context. Thus we suggest that it is important to examine how flexicurity arrangements can moderate the effect of past and present unemployment experience on subjective well-being among young people -- a group that have not been considered by research on institutions and well-being.
In particular, we use multilevel models to analyse whether the impact of individual unemployment on well-being (life satisfaction) is better accounted for by institutions and policies that foster greater job prospects or those that increase financial security. We use individual level data on 20 countries from the European Social Survey (ESS) (2004, 2010) and combine these with country-level information on institutions and policies drawing on OECD sources among others. The ESS provides cross-national data with information on family and social supports, measures of perceived insecurity, and outcome measures such as life satisfaction.[ii] We define youth as all persons between 15 and 34 in order to take into account early career insecurity which has been shown to still be prevalent in the early 30s particularly but not exclusively in Southern Europe (see discussion in O'Reilly et al. 2019). In order to capture potential heterogeneity in life satisfaction among young people, our models control for different age-groups.

This paper is structured around five sections. After this introduction, section 2 explores the literature around well-being of those with insecure labour market statuses and particularly the unemployed, focusing on research relating to young people and the institutional arrangements for flexibility and security. The third section focuses on methods, concepts and measurement. Section 4 presents multi-level models of the impact of past and present unemployment on the subjective well-being of young people, contextualised with those for older workers, and how it is impacted by institutions and flexibility-security policies. Finally, the fifth section discusses the results of our analysis and draws out the implications for young people and labour market policies that seek to balance flexibility and security.

Literature

There is a significant body of research that demonstrates the consequences of unstable employment on physical and psychological health and well-being. These studies can be broadly grouped around those that focus on unemployment (e.g. Bell and Blanchflower 2011) and those that focus on job insecurity (e.g. de Witte 2005 and Virtanen et al. 2005 for review studies on subjective and, respectively objective job insecurity). There are a limited number of studies that deal with both the consequences of unemployment and job insecurity on well-being and health (see Gebel and Voßemer 2014; Voßemer et al. 2018). However, the analysis of the impact of unstable employment on young people, particularly across institutional settings, is less developed. Here we will exclusively focus on the studies that focus on unemployment as these reflect best the approach adopted in our paper.

There is a long and rich history of research on the link between unemployment and mental well-being dating back to the 1930s. The large literature highlights the negative consequences of job loss for

psychological well-being. A number of meta-analyses of the psychological literature confirm these findings but also a strong positive boost to well-being upon re-entering employment (e.g. McKee-Ryan *et al*. 2005; Paul and Moser 2009).

These negative effects of unemployment extend beyond the pecuniary impact though there is a continuing debate on the relative influence of financial and non-financial factors, such as stigma, and loss of meaningful activity (Latif 2010; Nordenmark & Strandh 1999).

Many of the studies observe differences in the strength of the relationship between unemployment and well-being based on the characteristics of the unemployed person, such as gender, social class, age and family status (Nordenmark & Strandh 1999). A number of studies have found that the psychological impact of unemployment is greatest for prime-age workers, while younger workers and those approaching retirement age suffer less (Theodossiou 1998; Latif 2010). However, this finding is not universal (see McKee-Ryan et al. 2005 for a review). Some have attributed the weaker psychological impact of unemployment among young people to lower employment commitment (Jackson et al. 1983; Carle 1987) while alternative explanations relate to the greater financial and family commitments of prime-age workers (Jackson and Warr 1984).

Gebel and Voßemer (2014), drawing on the German Socio-Economic Panel and looking at both unemployment and objective job insecurity found that unemployment, compared to temporary employment, is still the greater threat to individuals' psychological health. Voßemer et al. (2018), using ESS data, show that labour market policies such as ALMP and PLMP and EPL are important in shaping the experience of unemployment, but less relevant for workers in insecure jobs (fixed-term or no contract).

The potential effects of unemployment and job insecurity on well-being may not be limited to current experiences. A scarring effect of past unemployment (in the previous five years) on current well-being was found by Clark et al (2001) while Bell and Blanchflower (2011) find that spells of unemployment in the early career were associated with lower life satisfaction, poorer health status and reduced job satisfaction. Furthermore, these authors show that the overall levels of happiness among young people fall as aggregate levels of unemployment rise, so the effects are not limited to those currently unemployed.

For unemployment, there is a growing body of research that investigates whether the prevailing unemployment rate or economic situation in a country influences individual experiences. One hypothesis is that higher unemployment rates moderate the negative impact of unemployment by normalising the experience, reducing expectations and reducing the individual stigma (e.g. Clark 2003). Alternatively, high unemployment may aggravate distress by depleting the level of support in wider social networks and reducing optimism about the future (see Gallie and Russell 1998). To date, the empirical results on the effects of the unemployment level on the well-being of the unemployed are mixed (Clark 2003; Oesch and Lipps 2013; Russell et al. 2013).

Voßemer et al. (2018) and Wulfgramm 2014 focus explicitly on the moderating role of institutions – though not directly inspired by the flexicurity concept - on unemployment and well-being. Using ESS data, Wulfgramm (2014) finds that the generosity of unemployment benefits moderates the negative effect of unemployment on life satisfaction whereas the positive moderating effect of active labour market policy turns out to be less robust. Voßemer et al. (2018) also find that more generous unemployment benefits buffer the negative effects of unemployment on well-being and they find that higher ALMP expenditures are associated with more negative effects of unemployment on well-being. The authors also found that reducing EPL for temporary contracts increased the negative effect of unemployment on wellbeing but not for regular contracts. Regarding passive unemployment benefits Eichhorn (2014) based on EVS data, in contrast, finds no significant moderating effect of the generosity of unemployment benefits on life-satisfaction. Paul and Moser's (2009) meta-analysis shows, however, that the negative effects of unemployment on mental health are lower where there is unemployment protection, stronger economic development and lower levels of income inequality. Overall, the results of these institutional approaches are not consistent with a limited focus on youth. Burchell (2009) argues that

an implicit assumption of 'flexicurity' is that job insecurity is no longer such a source of anxiety even though the correlation between insecurity and stress was no lower in countries seen as exemplars of flexicurity. He argued that flexicurity does not ameliorate non-financial costs of unemployment.

Drawing upon these studies we aim to extend previous analyses in order to examine age differences and to apply additional institutional and macro indicators in line with the flexicurity framework.

Methods, Concepts and Measurement

Our analysis uses two rounds of the ESS (2004, 2010) which contained special modules on work, family, and well-being and include a wider range of variables relating to job conditions, including perceived security and employability and subjective well-being. The sample is limited to 20 countries present in both waves (Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, UK). Using two waves allows us to include two observations per country for the macro effects in the multivariate models. We focus on both the active and inactive population between 15 and 64 years. Our case numbers are 21,130 for youth (15-34 years) and 37,356, respectively, for adults (35-64 years).

The data is comprised of individuals clustered within countries, and therefore standard models that do not account for this clustering leads to biased estimates. The observations are also nested within years. Schmidt-Catran and Fairbrother (2016) have demonstrated that ignoring the time level leads to downwards estimates of standard errors and we therefore specify clusters at three levels – country, year, and country/year.[iii] The models used are random intercept multi-level models, which allow us to estimate both individual-level effects and institutional-level effects for the flexicurity arrangements.

Measures of well-being and individual level explanatory variables

We adopt a measure of life-satisfaction, our dependent variable, based on an 11-point scale[iv] rather than the World Health Organisation well-being measure since it provided greater societal-level variance and it has wide usage in the literature (Diener & Suh, 1997; Clark & Oswald 1996; Wulfgramm 2014, Russell et al. 2013).

Average well-being among employed youths, measured on an 11-point scale, ranges from around 6 points in Greece to more than 8 points in Denmark (see figure A1, supplementary material). Among the unemployed, Hungary displays the lowest well-being with under 5 points and Slovenia and Norway the highest with around 7.5 points. Except for Slovenia where no difference seems to exist, satisfaction is higher among young employed than unemployed. We might imagine that unemployed youth in countries with more encompassing passive and active labour market policies will display well-being effects closer to those of employed youth. However, at first glance, there is no evident link between "flexicurity regime" and life-satisfaction when we look at overall life satisfaction outcomes across unemployed and employed persons. The difference between both groups is smallest in Norway, Greece and Portugal and is also relatively small in the Netherlands, Switzerland, the UK and Poland. Differences are largest in Sweden, Hungary and Slovakia. These findings indicate that we have to go beyond welfare state institutions in our models to identify factors that might generate resilience and increase well-being.

Regarding the individual level explanatory variables, our main interest lies in the impact of employment stability and the role of financial support from other household members on well-being. In addition to current employment status (employed, unemployed, out of the labour market) we include a separate indicator of past unemployment experience in the previous 5 years.[v] We expect that financial

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support from other household members would act as functional equivalent to institutional income security and thus moderate this effect. To test this we include a measure of financial hardship in the household, which identifies those who find it difficult or very difficult to cope on their current income.[vi] Based on the previous literature we include a range of control variables found to influence subjective well-being including; gender, age, education level, self-defined health status, household type, children of the respondent aged under 18 in the household, marital status, frequency of socialising and someone for support (see Table A1, supplementary material for detailed definitions).

The role of institutions in well-being: the flexibility-security framework and the macro-level variables

The choice of macro-level variables included in our analysis is inspired by the flexicurity concept, which maintains that the right combination of different forms of flexibility and security will lead to better outcomes with regard to employment prospects and beyond, including individual well-being. Some approaches, particularly the ones based on the Danish model, have stressed the benefit of combining labour market flexibility, reliable unemployment benefits and participation in active labour market policies – the so-called Golden Triangle (e.g. Madsen et al. 2013). Similarly, the European flexicurity strategy pointed to several elements that can contribute to smoother transitions between jobs: flexible contractual arrangements, life-long learning, active labour market policies and modern social security systems (EC 2007). This implies a shift from job security to employment security or employability and increased emphasis on financial security during transitions such as unemployment.

We propose a range of institutional variables that pertain to the three main dimensions of the flexibility-security nexus: (1) job security/labour market flexibility, (2) employment security/ employability and (3) income security (Table 1). Whereas the indicators in the first two dimensions capture employment prospects, the third dimension reflects financial security in unemployment. While the flexicurity concept stresses the importance of the right combinations of flexibility and security, our analysis can only capture these combinations to a limited degree (see section 4.2).

Table 1 about here

Regarding the job security/labour market flexibility dimension (1) we include information on employment protection legislation (EPL) for the norms and procedures in case of lay-offs. The EPL indicators separately measure the strictness of regulation of individual dismissal of employees on regular/indefinite contracts and the strictness of regulations on the use of fixed-term and temporary work agency (TWA) contracts.[vii] The evidence on the impact of EPL on employment and unemployment is inconclusive (OECD 2004) and the indicator was criticised for its methodology and exclusion of EPL achieved by collective bargaining (see Deakin et al 2007; ILO 2012, ch. 2). More recent versions of the indicator resolve some issues (see Venn 2009; OECD 2013). However, Myant and Brandhuber (2016) highlight five remaining shortcomings: arbitrariness in the way numerical scores are set, variation in enforcement of legislation, variation in to whom the law applies, omission of elements not derived from general employment law, and subjectivity in weighting of the sub-components. Furthermore, Maleszyk (2016) points to exemptions targeted at groups with less labour market attachment (e.g. apprentices) and enforced protection for others (e.g. pregnant women, workers close to retirement). For all these reasons we test an alternative measure of capturing employees' perceived feelings of labour market insecurity derived on the country level from the ESS data; we focus on those employed feeling very insecure.[viii] This indicator provides a direct sense of how (in)secure employees feel with regard to their job; it thus provides a subjective measure of job (in)security and labour market flexibility.

Dimension 2 captures employment security or employability. The idea here is that transitions between jobs can be facilitated and improved qualitatively by ensuring people's employability. This is usually done through participation in ALMP or life-long learning. We use an indicator on the expenditure on ALMP as percentage of GDP accounting for the level of unemployment and average country-level unemployment over 5 years.[ix] Both are standard measures used elsewhere (e.g. Chung & van Oorschot, 2011). As a complimentary measure we also include the participant stocks in ALMP. It cannot be ruled out that given lower eligibility to unemployment benefits youth will be disadvantaged vis-à-vis adults in access to ALMPs if they are administered in close cooperation with the passive benefits. On the other hand, recent reforms have seen a strong linking between benefit receipt and activation of youth (Leschke & Finn 2019). To our knowledge there is no comparative indicator that captures ALMPs targeted at youth only. Unemployment could alternatively have been included as contextual measure; we compile it under employment security/employability though given that lower level societal unemployment is likely to lead to smoother transitions.

Our third dimension covers income security. We use PLMP expenditure in percentage of GDP accounting for the level of unemployment. Arguably this is an indicator capture both benefit coverage and generosity. Given the more limited access of youth to unemployment benefits we would have liked to include a more direct measure of benefit coverage in our model but there are a number of problems with the available data (van Oorschot 2013). The unemployment benefit coverage data provided by Scruggs et al (2014) which is used in other publications seems to be particularly unsuitable for the young as it only contains less accessible unemployment insurance benefits and uses long contribution histories. For our purpose the best suited indicator would be the unemployment benefit coverage indicator from the EU Labour Force Survey data which has lately become available (Maquet et al. 2016). However, it does not provide information for Ireland, the Netherlands and Norway.

Finally, we include trade union density as a contextual factor, responding to criticism of an over-emphasis on EPL to the detriment of wider labour market structures (e.g. Ibsen and Mailand 2010) and to emphasise of the role of social partners in labour market regulation, which has been pointed to as one of the characteristics of flexicurity exemplars (Viebrock and Clasen 2009). Table A2 in the supplementary material provides the full information on the macro-indicators for each country in 2004 and 2010.

Model results

Individual level predictors of life satisfaction

In the first model we examine the individual level effects of levels of life satisfaction (Table 2). We include both current unemployment status and, separately, experience of unemployment in the past 5 years in order to capture 'scarring' influences on well-being. The reference group consists of those currently employed, and for our retrospective measure, those who have not experienced any unemployment spell, of 3 months or more, in the preceding five years. The following discussion focuses on the individual level effects for young people aged under 35, however the results for those aged 35-64 are provided in Table 2 for comparison.

Among young Europeans life satisfaction is highest among those who are economically inactive (including students), followed by the employed. Those with recent unemployment experience have lower satisfaction levels than those with none.
The models control for household financial difficulty, which suggests that the unemployment effect, both past and present, has a significant non-financial dimension.[x] Financial hardship is one of the strongest predictors of life satisfaction, reducing life satisfaction by almost one point on an 11-point scale for young people.

Availability of social support has been found to be a key component of well-being and a moderator of stressful life events (e.g. Hall & Lamont 2009). We find that more frequent contact with friends/family/others plus the availability of a close confidante are significantly associated with enhanced life satisfaction.

There is a small difference in the life satisfaction by gender among young Europeans favouring women. The age coefficients suggest that the younger age groups have significantly higher levels of satisfaction compared to those aged 30 to 34 years with satisfaction levels decreasing with age. The impact of co-residence with two-parents on life satisfaction is positive but not statistically significant, whereas young people living with a lone parent have significantly lower satisfaction compared to those living independently. As we control for financial difficulty this may be due to the increased psychological distress and work-family conflict among lone parents (e.g. Bianchi & Milkie 2010).

Table 2 about here

Having a child/children does not influence life satisfaction amongst the under 35s, living with a partner is associated with higher satisfaction but those who were previously married and are now divorced/separated or widowed have significantly lower satisfaction scores. Given these results, we cannot rule out that both material and immaterial family resources act as functional equivalents to institution support.

Institutional level effects

We test a range of institutional country level variables that reflect the aspects of the flexibility/security nexus (Table 1). We first examine the influence of each variable separately (Table 3, Models A and C) before testing the simultaneous effects for a sub-set of variables (Table 3, Models B and D). We then estimate models that test the cross-level interactions between institutional characteristics and individual employment status (Table 4). To facilitate the comparison of the different institutional effects we have rescaled all institutional variables to range from zero to one. The coefficients therefore represent the difference between those in the country/year where the value of the variable is lowest and those in the country/year where the value is highest (e.g. the difference between the lowest and highest unemployment rate observed).

We first examine indicators of **the job security/labour market flexibility dimension.** Stricter regulation of individual dismissal of employees on regular contracts (a reflection of lower flexibility) is only weakly associated with well-being for youth as a whole and, contrary to segmentation theory, this negative effect is stronger for over 35s, and only significant (negative) for the young employed (cross level interactions Table 4, model 1).[xi] This effect may be driven by employed young people with insecure contracts, given the association between strong EPL for regular contracts and the proportion of youth on fixed term contracts.

The strictness of regulations on the use of fixed-term and TWA contracts has no effect on young people's well-being overall nor does this vary by current/past employment status (see Table 4, model 2 and supplementary material). The effect is not significant for older adults, including in the cross-level interactions by employment status (see supplementary material). These results suggest that EPL as currently measured has relatively little influence on the life satisfaction of young people.

In contrast to the weak influence of EPL indicators, the proportion of those in employment who feel very insecure is consistently and more strongly associated with lower life satisfaction, this effect holds for both

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youth and adults over 35. There is no significant interaction with current personal employment status, however the effect is marginally weaker for those who experienced unemployment in the last 5 years (Table 4, model 6).

The second set of measures relate to **employment security or employability**. This encompasses measures of the extent of unemployment in the national labour market and investment in ALMP. Greater security in terms of higher ALMP spending per unemployed person and lower rates of unemployment are significantly and positively associated with life satisfaction for young people under 35 years and for those aged over 35. The cross-level interactions show that the positive association between well-being and ALMP is stronger for those in employment than for those unemployed or out of the labour market (Table 4, model 5), a pattern also found by Voßemer et al 2018.[xii] Perhaps activation policies involving greater monitoring and sanctions counteract some of the positive well-being effects of ALMP. The proportion of the labour force in ALMP has no influence on life satisfaction; this may arise as it is a more ambiguous indicator, incorporating as it does, both levels and intensity of intervention.[xiii]

There is a very small reduction in life satisfaction associated with higher unemployment rates, less than .05 difference on an 11 point scale between those experiencing the highest and lowest unemployment rates. This effect is somewhat weaker but still statistically significant for young people who are unemployed compared to those in employment (Table 4, model 3) in line with the buffering hypothesis but the effect is too small to be meaningful,[xiv] suggesting the individual experience of unemployment that has the dominant effect on wellbeing rather than wider societal levels.

Table 3 about here

Income security as measured by spending on unemployment benefits (adjusted by unemployment rate) has a positive influence on life satisfaction for youth and a somewhat higher influence for adults. Living in the country/year with the most generous welfare is associated with an increase of 1.4 in young people's life satisfaction scores relative to those in the least generous context. Interestingly, the cross-level interactions point to a weaker effect on those youth currently unemployed compared to employed youth (Table 4, model 4) and further tests show that the PLMP effect for unemployed youth is insignificant[xv] whereas for those aged over 35 the effect does not differ by current or past employment status (supplementary material). This may arise in the case of younger unemployed since few are covered by such income supports (Leschke and Finn 2019). Moreover, the influence of the welfare system is to some degree already working through the indicator of financial difficulty at the individual level. As noted above, the coefficient for unemployment is significantly reduced when financial difficulty is included. For this reason we also ran the models without the financial difficulty controlled (see supplementary material). Without financial difficulty, both the negative effect of current unemployment increases and the positive co-efficient for PLMP spending increase as anticipated. This shows that the PLMP effect is partially mediated through reduced financial stress. However, the pattern of the interactions with individual unemployment remains the same in that the positive effect of PLMP is greater for the employed group than for young people unemployed or out of the labour market.

Finally union density as an important **contextual** variable capturing representation and an additional source of security at the workplace has a small positive association with life satisfaction for those aged under 35 and a stronger association for those aged over 35 (Table 3) as might be suggested by variation in union density by age (Vandaele 2019).

In Models B and D (Table 3) we enter the institutional-level variables simultaneously. This corresponds with institutional complementarities at the heart of flexicurity. Due to the small number of cases at the second level there is a risk of over-specifying the model, we therefore select one variable to represent each policy dimension -- the indicator with the strongest association with wellbeing when introduced separately in the models. The results suggest that for young people the flexibility measure, as captured by

the level of perceived insecurity among workers at the societal level, had the strongest (negative) influence on life satisfaction.

In contrast, the employability dimension of flexicurity as captured by ALMP expenditure per unemployed plays a positive role at the societal level for life satisfaction. However, this effect is stronger for those aged over 35 years than youth. The effect of ALMP for youth becomes insignificant when unemployment benefits are also included. When included simultaneously with other institutions, spending on unemployment benefits becomes insignificant for both youth and adults. Nevertheless, the strong role of financial difficulty at the individual level (see full set of results for Model B and D in the supplementary material) means that the role of income security for life satisfaction should not be under-estimated.[xvi]

A model without any controls demonstrates 6% of variance in life satisfaction among young adults occurs at the country level, and a further 2% occurs at the country-year level. Less than 1% of variance is explained by the year. The remainder of the variance occurs at the individual level. This proportion of variance at the country and country-year levels is higher for adults aged 35 to 64 years (14% and 4% respectively). The individual controls introduced in the first model (Table 2), explain 15% of variance at the individual level, 55% of the country-level variation and 39% of the country-year variation. This means that over half of the original differences between countries can be explained by variation in the characteristics of the individuals within each country. Even when controlling for individual characteristics there is more variation at the country and country/year level for older workers (6% versus 3%) suggesting societal level factors have a stronger influence for this age group.

For young people adding the three institutional variables explains an additional 25% of variance in wellbeing at the country level, 19% of variance at the country-year level and 2% of total variance (the figures for over 35s are 21%, 23% and 3% respectively). Therefore, while there is more variation at country level among older workers even when controlling for composition, these three institutional characteristics combined have a similar impact for both age groups. It seems therefore that other institutions may be more influential for older than younger workers.

Table 4 about here

Discussion and conclusions

The goal of this paper was to explore whether flexicurity arrangements moderate the effect of unemployment on subjective well-being among young people – a group not considered in previous studies. A focus on employed and unemployed youth seems appropriate as they have higher unemployment rates and are more likely to experience employment insecurity. While young adults report higher levels of satisfaction than older adults the gap in satisfaction between employed and unemployed youth for the sample as whole, is at least as wide as for older adults. There are important variations across countries in the satisfaction of employed and unemployed youth but in aggregate, this variation does not seem to be linked to "flexicurity regimes". These results indicate that we have to go beyond welfare state institutions in our analyses and examine the household context, and in particular material and immaterial support by family and social networks that might generate resilience and impact upon well-being. The ESS 2004 and 2010 waves which contained special modules on work, family and well-being were particularly suited to this task.

With regard to the institutional analysis, we assess a range of alternative measures capturing the flexibility-security interface. As regards job security/labour market flexibility, we went for example beyond the commonly used – but often criticised – EPL indicators by including a subjective measure of job insecurity derived from the ESS data. To capture employment security/employability we took into

account both unemployment rates and measures relating to ALMPs. We demonstrate that it is important to consider the strength of industrial relations as a contextual factor and our results support studies that find a positive impact of trade union density on well-being.

Our results show that institutions at the flexibility-security interface matter but that individual level factors, and in particular material and immaterial family resources, are more important. Also, institutions, according to our models, matter more for older adults than for youth, which may be explained with youth having lower access to unemployment benefits and often access to AMLP and, lower protection associated with an over-representation in temporary positions. The results imply that material and immaterial support deriving from the family or other social networks might act as a functional equivalent to institutions and policies for flexibility-security. On the other hand, we find little variation in well-being by gender among young people. However, it is likely that individual level factors especially those relating to family structure including the age of children might vary across young men and women.

While overall well-being of youth is higher than that of adults and institutions seem to matter more for adults than youth, we found similarities in terms of direction of effects for young people and adults across the models including the effects on institutions.

Our analysis for the segmentation hypothesis shows that employment protection institutions as captured by conventional indicators, have little influence on well-being of youth. However, subjective insecurity across the workforce as a whole is associated with lower life satisfaction regardless of current employment status - for both youth and adults.

At the country level, we find a strong significant effect for ALMP expenditure when included alone -- it has a stronger impact on the employed than unemployed or inactive (though the effect is still positive for both groups). This pattern was also found by Voßemer et al. (2018) and may be associated with the conditionality and sanctions attached to supports to the unemployed in high ALMP countries. The ALMP effect for youth becomes insignificant when included with expenditure on unemployment benefits and subjective insecurity levels

We find a small positive effect for income security (passive expenditure per unemployed) when included alone. The larger effect for older adults reflects that income security policies cater less to youth than older adults due to required contribution histories, disadvantaging youth, and means-testing which can adversely affect youth still living at home. In line with the findings on ALMP expenditure, the effect on PLMP expenditure is more positive for those employed and non-significant for unemployed and inactive youth. In fact we find no effect on income security for either youth or older adults when controlling for subjective insecurity levels and ALMP expenditure per unemployed. At the same time our models controlling for financial hardship at the individual level show an important positive role of income security at the individual level and a strong positive impact of living with a partner. Here we see signs of welfare at the household level acting as functional equivalents of weak welfare state provision.

Overall our results have implications for the analysis of the role of institutions for labour market outcomes among particular sub-groups, namely young people. First, flexicurity presupposes the combination of policies that foster flexibility and security yet data availability means that we cannot test these outcomes directly. Second, institutional measure that distinguish directly between youth and adults are frequently unavailable and thus limit analyses. Third, in spite of some recent developments the institutional variables are still insufficient regarding the income-dimension of flexicurity, for example in relation to unemployment benefits. Given the poor state of available measures and the limitations of cross-sectional data we assess youth-sensitive institutional variables by using different specifications and alternative measures. Given the centrality of labour market policy at the flexibility-security interface to well-being outcomes adequate measures and thus analysis are essential. It is important that institutional measures applicable to diverse population groups – young and old, men and women – are enhanced to improve the analysis of policy measures and subsequent labour market processes and outcomes for the whole population.

Biographical note

Helen Russell is research professor at the Economic and Social Research Institute in Dublin and adjunct professor of sociology at Trinity College Dublin.
Janine Leschke is professor with special responsibilities in Comparative Labour Market Analysis at the Department of International Economics, Government and Business at Copenhagen Business School
Mark Smith is professor of Human Resource Management at Grenoble Ecole de Management

Endnotes

[i] https://ec.europa.eu/commission/priorities/deeper-and-fairer-economic-and-monetary-union/european-pillar-social-rights/european-pillar-social-rights-20-principles_en

[ii] These two rounds of the ESS are especially suitable as they contained special modules on work, family and well-being and include a wider range of variables relating to job conditions, including perceived security and employability and to subjective well-being.

[iii] This corresponds to Model F in Schmidt-Catran & Fairbrother typology.

[iv] "All things considered, how satisfied are you with your life nowadays?" measured on an 11-point scale from 0 extremely dissatisfied to 10 extremely satisfied.

[v] Only spells of past unemployment of three months or more are recorded.

[vi] To test the full effect of unemployment on well-being, including its impact via financial hardship we also run the models without the financial hardship measure (see supplementary material). We also test the effect of institutional supports without this control.

[vii] EPL for regular contracts incorporates 8, EPL for fixed-term and TWA contracts 6 data items. The EPL indices are measured on scales ranging from 0 to 6, 0 depicting very low protection, 6 very high protection (for details see OECD 2013).

[viii] These indicators are problematic in themselves. There is for example a wide degree of variation in the security and other working conditions enjoyed by 'permanent' and temporary employees across countries (e.g. Paugam & Zhou, 2007). While one could have considered including this indicator also at the individual level this is not possible in our set-up as it is not available for the inactive population.

[ix] We have tested alternatives such as lagged year to year change in unemployment rates which led to very similar results.

[x] If financial difficulty is not included in the model, the coefficient for unemployment is -.70, the coefficient for out of the labour market is +.13 and for past unemployment is -.43 (all significant at .01 level). See supplementary material Table A3.

[xi] While we display a positive significant association for unemployed and OLM in Table 4 when we reverse code the interactions so the unemployed and OLM in turn are the reference group we find that the effect for unemployed and OLM youth is not significant. The reverse coded results are available in the online appendix (Table A7 and Table A8).

[xii] Reverse coding of the cross-level interactions shows the positive ALMP effect on wellbeing for the young unemployed is significant at the 10 per cent level and for the OLM group at the 1 per cent level.

[xiii] The alternative indicators of unemployment, which measured changes in youth/adult unemployment in the preceding years (not shown) also reduced life satisfaction scores.

[xiv] Reverse coding of the interaction terms shows that the effect of total unemployment rate remains strongly negative for the unemployed youth (-.713) but is not significant for those out of the labour market.

[xv] See supplementary material. For the inactive group PLMP is positive and significant at the 10 per cent level.

[xvi] As a sensitivity check we re-ran the models that included the 3 institutional variables simultaneously dropping each country in turn. For young people, the models reproduced the same pattern of results in all cases i.e. the percentage of employees feeling insecure was significantly negative in all 20 models while ALMP and PLMP were insignificant in all models. For older workers the ALMP effect became non-significant when Ireland was dropped from the model (compared to $P<.10$ in the full model). As the focus is on younger workers this does not undermine our findings. Moreover removing Ireland does not affect the results of the model when ALMP is included.

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Table 1: Macro-level institutions and policy measures and how they link to the flexicurity framework

Employment prospects		Financial security
(1) Job security/labour market flexibility	(2) Employment security/ employability	(3) Income security
• EPL indicators separately for regular and temporary workers (OECD) • Perceived insecurity* (ESS)	• Active Labour Market Policy (ALMP) expenditure in % of GDP/unemployed (OECD) • Participant stocks in ALMP % of labour force (OECD) • Average unemployment over 5 years, youth and total (LFS)	• Passive Labour Market Policy (PLMP) expenditure in % of GDP/unemployed (OECD)
Trade union density (ICTWSS)		

* Percentage of employees who feel very insecure
Note: See Table A2 in the supplementary material for country scores for both time periods.

Table 2: Random intercept multi-level models of Life Satisfaction (scored 0-10): Individual Effects

		Under 35 years	35-64 years	
(easily) Coping on present income	Difficult/very difficult to cope on hh income	-0.861***	-1.243	***
Current emp status Ref: employed	Unemployed	-0.504***	-0.385	***
	Out of Lab Market	0.178***	-0.065	**
No unemp in past 5 years	Unemp in Past 5 years	-0.350***	-0.382	***
	Female	0.0445*	0.158	***
Self-rated health good/very good	Health (fair/bad/very bad)	-0.828***	-0.789	***
Age Ref 30-34	Age 1519	0.508***		
	Age 2024	0.215***		
	Age 2529	0.128***		
Age Ref 35-54	Age 55-64		0.249	***
Social support	Frequent Socialise	0.170***	0.133	***
	Someone for support	0.548***	0.551	***
Ref: Not living with parents	Live with one parent	-0.157***	-0.066	
	Live with two parents	0.045	0.001	
Ref: No Children	Child(ren) under 18	0.024	0.069	***
Ref: single never married	Live with Partner	0.477***	0.391	***
	Widowed	-1.215***	-0.057	
	Separated/divorced	-0.165*	-0.170	***
Ref: Third level Education	Less than lower secondary	-0.157***	-0.107	***
	Lower secondary	-0.184***	-0.057	*
	Upper secondary	-0.144***	-0.086	***
	Post Secondary	-0.129*	-0.089	*
	Constant	6.057***	6.030	***
Variance Components				
	Variance (country)	.116	.307	
	Variance (year)	.003	.002	
	Variance (country-year)	.045	.089	
	Variance individual	3.120	3.451	
	N Individuals	21,130	37,356	
	N Countries	20	20	
	N Country Years	39	39	

Source ESS data, 2004 and 2010, Round 2 and 5.

*** p<0.01, ** p<0.05, * p<0.1

Note: There are 39 country years because France (2004) drops out when we include "coping on present income".

Table 3: Institutional and Labour Market Influences on Life Satisfaction

	Under 35		35-64 yrs	
	A	**B**	**C**	**D**
	Separate models	**Jointly estimated**	**Separate models**	**Jointly estimated**
Individual level controls	√	√	√	√
JOB SECURITY/LM FLEXIBILITY	Coef	Coef	Coef.	Coef
Employment protection regular contracts	-0.199 *		-.350 **	
Employment protection temp contracts	-0.011		-.181 [3]	
Propn of employed very insecure	-2.432 ***	-0.769 **	-3.44 ***	-1.031 **
EMPLOYMENT SECURITY/ EMPLOYABILITY				
ALMP spending % GDP[2]	3.836 ***	0.630	6.363 ***	1.148 *
Participants in ALMP as % of lab force	0.034		0.061	
Average Youth Un Rate 5 years	-0.022 *		-0.038 **	
Average Total Un rate 5 years	-0.038 **		-0.060 **	
INCOME SECURITY				
Passive spending % GDP[2]	1.358 **	0.047	2.247 ***	0.128
CONTEXTUAL				
Union density	0.011 ***		0.175 **	

Note: All institutional variables rescaled to run from 0 to 1. The results in column A and C are taken from multiple models in which each institutional variable is separately evaluated. In Models B and D the institutional variables are added simultaneously, the full models for B and D are available in the supplementary material. Models include all individual level controls.

*** p<0.01, ** p<0.05, * p<0.1

[1] Lagged by 1 year.

[2] Spending adjusted by unemployment level.

[3] The model including EPL for temporary contracts for the 35-64 age group would not converge until the variable for financial difficulty was dropped.

Table 4: Cross-level interactions: Individual Employment Status and institutional factors Under 35 years

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Individual level Vars							
Currently Unemp	-0.716***	-0.696***	-0.507***	-0.342***	-0.338***	-0.442***	-0.428***
Current OLM	0.0436	0.0866*	0.0814*	0.303***	0.303***	0.133***	0.324***
Unemployed in past 5 years	-0.425***	-0.409***	-0.397***	-0.329***	-0.318***	-0.418***	-0.392***
Control Variables[1]	√	√	√	√	√	√	√
Country level * Individual employment status							
EPL regular contracts[2]	-0.875**						
Unem * EPL regular	0.365***						
OLM* EPL regular	0.567***						
Past Un * EPL regular	0.207						
EPL temp contracts[2]		-0.216					
Unem*EPL temp contracts		0.245**					
OLM *EPL temp contracts		0.470***					
Past Unem * EPL temp		0.155					
Un Rate Average 5 years[2]			-0.730***				
Unemp * Un rate			0.308***				
OLM * Un rate			0.0163				
Past unemp * Un rate			0.146				
PLMP[2]				0.931***			
Unemp *PLMP				-0.472***			
OLM * PLMP				-0.667***			
Past unemp * PLMP				-0.0812			
ALMP[2]					1.253***		
Unem*ALMP					-0.460***		
OLM *ALMP					-0.705***		
Past unemp * ALMP					-0.131		
% Feel Insecure						-1.156***	
Unemp*% feel insecure						0.153	
OLM*% feel insecure						-0.194	
Past unemp * % feel insecure						0.234*	
Union Density							0.922***
Unem*union density							-0.241
OLM * union density							-0.438***
Past unemp * union density							0.141
Constant	6.380***	6.142***	6.290***	5.815***	5.713***	6.384***	5.741***
N	21,130	21,130	21,130	21,130	21,130	21,130	21,130

[1] Models include all individual level controls shown in Table 2

[2] The main effect for the institutional variable is the effect for the employed who are the reference group.

*** p<0.01, ** p<0.05, * p<0.1

Figure A1: Life satisfaction among employed and unemployed aged under 35 years by country
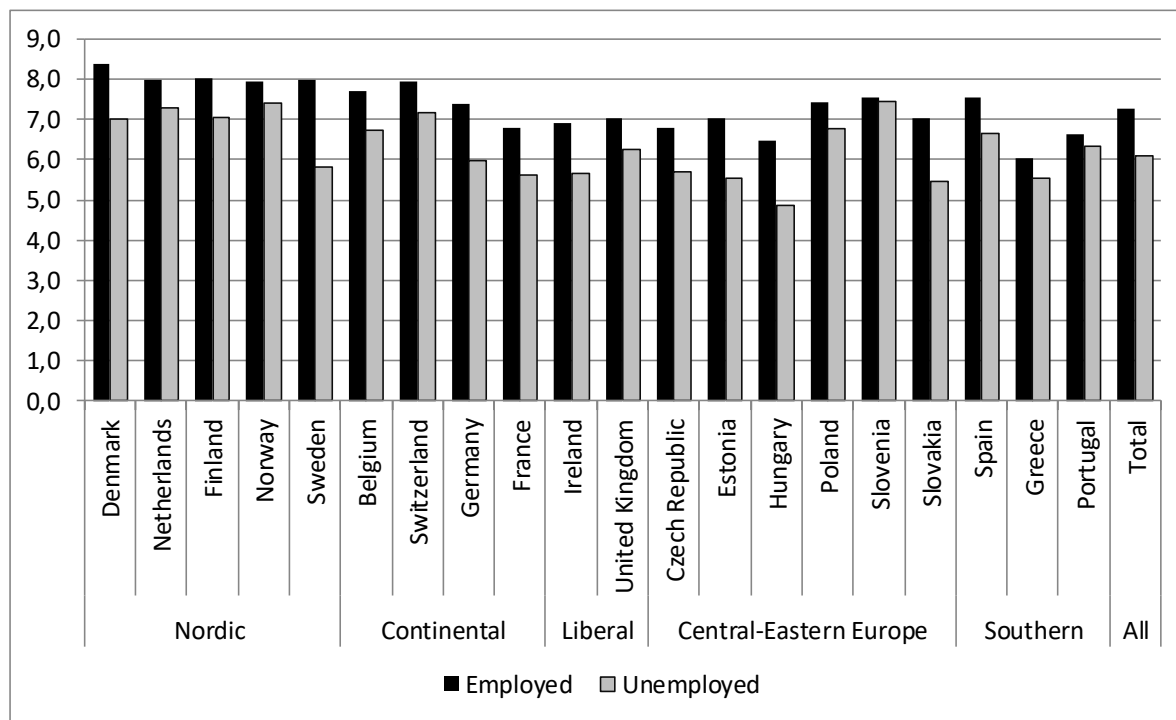
Source ESS data, 2010 wave.

Note: Weighted by post stratification weights.

Appendix Table A1: Individual level variables and their definition

Dependent variable	Well-being	11-point scale on life satisfaction (All things considered, how satisfied are you with your life nowadays?)
Explanatory variables	Current employment status	employed (ref); unemployed; out of labour market (including students)
	Unemployment experience	No unemployment in past 5 years (ref); unemployment in past 5 years
	Financial hardship	How is the respondent's household coping on their present income? Coping or easily coping (ref) compared to difficult/very difficult to cope
controls	Self-defined health status	"How is your health in general? Would you say it is very good/good/fair/bad/very bad?" Given the distribution of responses in our sample is positively skewed the variable is dichotomised between those who say their health is fair to very bad and those who say it is good/very good.
	Frequent socialise	6-point scale capturing how often respondents meet socially with friends, relatives and neighbours (0 = never and 6 = daily)
	Someone for support	Binary variable capturing whether or not the respondent has someone to talk to about personal issues
	Household type	Using the household grid we identify whether the respondent is living with either or both parents, whether the respondent is living with a partner, and if not, whether the respondent was previously married.

Additional controls: gender, age, education level, children under 18 in the household, marital status.

Appendix Table A2: Macro-level indicators by country, 2004 and 2010

		Job security						Employment security/Employability								Income security		Context	
		EPL regular contracts (v1)		EPL temporary contracts (v1)		Perceived insecurity 2004		ALMP exp (cat.2-7) in % GDP/unempl.		ALMP partic. stocks (cat 2-7) in % of labour force		av. unempl. over 5 years, total 15-74		av. unempl. over 5 years, youth 15-34		PLMP exp (cat.8-9) in % GDP/unemp		Trade Union Density	
	YEAR	2004	2010	2004	2010	2004	2010	2004	2010	2004	2010	1999-2003	2005-2009	1999-2003	2005-2009	2004	2010	2004	2010
BE	Belgium	1,81	2,00	2,38	2,38	11,9	9,8	0,06	0,07	4,78	6,46	7,2	7,8	11,1	12,7	0,32	0,27	53,1	50,6
CZ	Czech Republic	3,31	3,05	0,50	1,31	21,8	32,1	0,02	0,03	1,15	1,23	8,0	6,3	11,2	9,1	0,03	0,05	21,0	17,3
DK	Denmark	2,13	2,13	1,38	1,38	10,8	10,4	0,26	0,22	5,06	6,52	4,7	4,4	6,1	6,1	0,51	0,24	71,7	68,5
EE	Estonia	2,74	1,81	1,88	1,88	9,2	3,2	0,00	0,01	0,17	0,91	11,9	7,5	14,5	9,6	0,02	0,05	11,9	8,1
FI	Finland	2,17	2,17	1,56	1,56	10,4	8,2	0,08	0,10	3,81	4,09	10,8	7,5	15,7	10,8	0,20	0,21	73,3	70,0
FR	France	2,47	2,38	3,63	3,63	25,8	23,3	0,08	0,09	5,54	5,65	9,6	8,4	14,0	13,1	0,19	0,16	7,8	7,9
DE	Germany	2,87	2,87	1,00	1,00	15,3	11,3	0,08	0,08	3,94	4,19	8,6	9,1	8,2	10,6	0,22	0,19	22,2	18,6
GR	Greece	2,80	2,80	2,75	2,75	25,6	37,6	0,01	0,02	0,41	1,83	10,6	9,0	18,5	16,1	0,04	0,06	24,5	25,4
HU	Hungary	2,00	2,00	1,13	1,13	11,6	18,1	0,04	0,05	2,1	4,89	6,1	8,0	8,5	12,4	0,06	0,07	16,9	16,8
IE	Ireland	1,44	1,27	0,63	0,63	8,6	21,0	0,12	0,06	3,59	4,31	4,5	6,4	5,4	8,6	0,20	0,21	34,8	36,6
NL	Netherlands	2,88	2,82	0,94	0,94	12,6	13,5	0,20	0,18	4,67	4,45	2,9	3,6	3,6	4,2	0,45	0,39	21,6	19,3
NO	Norway	2,33	2,33	2,75	3,00	9,5	4,6	0,15	0,14	2,7	2,35	3,7	3,2	6,6	5,3	0,15	0,14	55,0	54,8
PL	Poland	2,23	2,23	1,75	1,75	21,6	13,4	0,02	0,06	2,88	4,09	17,3	11,3	24,3	15,8	0,05	0,04	19,0	14,1
PT	Portugal	4,42	4,13	2,56	1,94	11,0	16,5	0,08	0,05	2,68	3,62	4,7	8,2	6,7	12,2	0,19	0,13	21,4	19,3
SK	Slovakia	2,22	2,22	0,63	1,63	46,7	45,2	0,00	0,02	4,29	3,83	18,0	12,5	23,5	16,2	0,02	0,04	23,6	16,9
SI	Slovenia	2,65	2,65	1,81	1,81	7,0	9,9	0,04	0,05	1,63	2,57	6,5	5,5	9,7	8,8	0,06	0,09	43,7	26,3
ES	Spain	2,36	2,36	3,25	3,00	11,2	14,2	0,06	0,04	9,79	12,82	12,4	11,0	17,0	15,6	0,14	0,16	15,3	15,6
SE	Sweden	2,61	2,61	1,44	0,81	11,0	8,5	0,13	0,10	3,68	4,38	5,7	7,1	8,2	12,0	0,21	0,09	76,9	68,9
CH	Switzerland	1,60	1,60	1,13	1,13	5,2	5,6	0,14	0,11	1,62	1,47	3,1	3,9	4,3	5,5	0,23	0,17	19,5	17,2
UK	United Kingdom	1,20	1,20	0,38	0,38	10,3	15,8	0,01	0,01	0,34	0,23	5,2	5,7	7,2	8,6	0,04	0,04	28,3	27,1
	Source	OECD database		OECD database		ESS		OECD database		OECD database		LFS agg. data		LFS agg. data		OECD database		ICTWSS database	

Source: OECD Indicators of employment protection (time series data): http://www.oecd.org/els/emp/oecdindicatorsofemploymentprotection.htm; Eurostat EU Labour Force Survey (EU-LFS): http://ec.europa.eu/eurostat/web/lfs/data/database; OECD.stats (Labour): https://stats.oecd.org ; ICTWSS: Database on Institutional

Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts in 51 countries between 1960 and 2014: http://www.uva-aias.net/en/ictwss, version 2014.

Notes: EPL regular and temporary contracts, no data for 2004 for SI and EE, replaced by earliest available data (2008); ALMP participant stocks 2004: GR, PL, SI no data, replaced by 2002 (GR), 2005 (PL and SI); ALMP participant stocks 2010: UK no data, replaced by 2009. TU density 2004: 2003 for EE and SI; TU density 2010: 2009 for CZ, 2011 for EE, 2008 for HU.

Appendix Table A3: Random Effects Model of Life Satisfaction without controls for financial difficulty: Individual level variables

		Under 35 years Indiv level	Under 35 years Add institutional
Ref: Employed	Currently Unemp	-0.698***	-0.697***
	Current out lab market	0.127***	0.127***
Ref: no past unem	Unemp past 5 yrs	-0.426***	-0.424***
Ref: Male	Female	0.023	0.023
Ref: (V)Good Health	Health fair to bad	-0.907***	-0.908***
Ref: Age 30-34	Age 15-19	0.574***	0.574***
	Age 20-24	0.217***	0.216***
	Age 25-29	0.133***	0.133***
	Frequent Socialise	0.184***	0.183***
	Someone for support	0.551***	0.550***
Ref: do not live with parents	Live with one parent	-0.145***	-0.143***
	Live with two parents	0.163***	0.166***
	Child(ren) under 18	-0.008	-0.008
	Live with Partner	0.532***	0.532***
	Widowed	-1.138***	-1.133***
	Separated/divorced	-0.235***	-0.235***
	< lower secondary	-0.332***	-0.337***
	Lower secondary	-0.335***	-0.336***
	Upper secondary	-0.226***	-0.224***
	Post-secondary	-0.219***	-0.220***
Institutional	% Feel Insecure		-1.102***
	ALMP spend		0.770*
	PLMP spend		0.050
	Constant	5.895***	5.973***
	N weighted	23,263	23,263
	N unweighted	21,130	21,130

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

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Appendix Table A4: Cross-level interactions: Individual Employment Status and institutional factors 35 to 64 years

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Individual level Vars						
Currently Unemp	-0.521***	-0.842***	-0.333***	-0.459***	-0.424***	-0.302***
Current OLM	-0.0406	-0.197***	-0.119***	-0.0832**	-0.0392	-0.111***
Unemployed in past 5 years	-0.367***	-0.691***	-0.316***	-0.410***	-0.391***	-0.456***
Control Variables[1]	√	√	√	√	√	√
Country level * Individual employment status						
EPL regular contracts[2]	-1.129**					
Unem * EPL regular contracts	-0.0661					
OLM* EPL regular contracts	0.355*					
Past Un * EPL regular contracts	-0.0456					
EPL temp contracts[2]		-0.265				
Unem*EPL temp contracts		0.033				
OLM *EPL temp contracts		0.394**				
Past Unem * EPL temp		0.327**				
Un Rate Average 5 years[2]			-0.903**			
Unemp * Un rate			0.173*			
OLM * Un rate			-0.137			
Past unemp * Un rate			-0.184			
PLMP[2]				1.063***		
Unemp *PLMP				0.064		
OLM * PLMP				0.284		
Past unemp * PLMP				0.110		
Almp[2]					1.635***	
Unem*ALMP					-0.094	
OLM *ALMP					0.175	
Past unemp * ALMP					0.040	
% Feel Insecure						-1.572***
Unemp*% feel insecure						0.161
OLM*% feel insecure						-0.255
Past unemp * % feel insecure						0.243*
Constant	6.507***	5.892***	6.375***	5.804***	5.628***	6.535***
Unweighted N	37,356	37,356	37,356	37,356	37,356	37,356

[1] Models include all individual level controls listed in Table 2.

[2] The main effect for the institutional variable is the effect for the employed who are the reference group.

Model for EPL Temporary contracts would not converge until the dummy for financial difficulty was excluded from the model, hence the coefficients for current employment status are much stronger.

*** p<0.01, ** p<0.05, * p<0.1

Appendix Table A5: Cross-Level Interaction Models for Under 35 excluding controls for financial difficulty

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Individual level Vars						
Currently Unemp	-0.817***	-0.917***	-0.645***	-0.556***	-0.550***	-0.617***
Current OLM	0.001	0.038	0.011	0.236***	0.235***	0.101*
Unemployed in past 5 years	-0.548***	-0.481***	-0.476***	-0.415***	-0.412***	-0.492***
Control Variables[1]	yes	yes	yes	yes	yes	yes
Country level * Individual employment status						
EPL regular contracts[2]	-0.940*					
Unem * EPL regular contracts	0.250*					
OLM* EPL regular contracts	0.341					
Past Un * EPL regular contracts	0.295					
EPL temp contracts[2]		-0.179				
Unem*EPL temp contracts		0.239*				
OLM *EPL temp contracts		0.540**				
Past Unem * EPL temp		0.146				
Un Rate Average 5 years[2]			-0.989**			
Unemp * Un rate			0.253*			
OLM * Un rate			-0.121			
Past unemp * Un rate			0.110			
PLMP[2]				1.055**		
Unemp *PLMP				-0.414***		
OLM * PLMP				-0.584**		
Past unemp * PLMP				-0.0413		
ALMP[2]					1.490***	
Unem*ALMP					-0.398***	
OLM *ALMP					-0.624**	
Past unemp * ALMP					-0.055	
% Feel Insecure						-1.526***
Unemp*% feel insecure						0.089
OLM*% feel insecure						-0.252
Past unemp * % feel insecure						0.229
Constant	6.250***	5.965***	6.217***	5.616***	5.481***	6.325***
N	23,263	23,263	23,263	23,263	23,263	23,263
Unweighted N	21,130	21,130	21,130	21,130	21,130	21,130

[1] Models include all individual level controls listed in table 2.

[2] The main effect for the institutional variable is the effect for the employed who are the reference group.

*** p<0.01, ** p<0.05, * p<0.1

Appendix Table A6 : Life Satisfaction Models with Level 2 Institutional Controls: Full Results for Models B and D in Table 2 (Main Text)

		Under 35 Model B		35-64 years Model D	
Ref: no difficulty	Financial Difficulty	-0.856	***	-1.241	***
Ref: employed	Unemployed	-0.504	***	-0.385	***
	Out of Lab Market	0.178	***	-0.065	**
Ref: no un 5 yrs	Unem in past 5 years	-0.349	***	-0.382	***
Ref: male	Female	0.044	*	0.158	***
Ref: (v.)good health	Health (fair/bad/v. bad)	-0.830	***	-0.789	***
Ref: 30-35	Age 15-19	0.509	***		
	Age 20-24	0.214	***		
	Age 25-29	0.128	***		
Ref: 56-64	Age 35-55			0.248	***
	Frequent Socialise	0.169	***	0.132	***
	Someone for support	0.547	***	0.551	***
Ref: do not live	Live with one parent	-0.155	***	-0.064	
with parents	Live with two parents	0.048		0.003	
	Child(ren) under 18	0.024		0.068	***
Ref :Single	Live with Partner	0.478	***	0.392	***
never married	Widowed	-1.210	***	-0.055	
	Separated/divorced	-0.166	*	-0.169	***
Ref: Third	< lower secondary	-0.163	***	-0.109	***
level ed.	Lower secondary	-0.186	***	-0.058	*
	Upper secondary	-0.142	***	-0.085	***
	Post Secondary	-0.129	*	-0.090	**
Institutional	ALMP	0.630		1.110	*
	PLMP	0.047		0.136	
	% Feel Insecure	-0.769	***	-1.034	***
	Constant	6.084	***	6.030	***
Observations	Unweighted N	21,130		37,356	

*** p<0.01, ** p<0.05, * p<0.1

Table A7: Under 35 Years: Interactions between Personal Employment Status by Institutional Factors – With Unemployed as Reference Group

	Model 1	Model2	Model3	Model 4	Model 5	Model 6	Model 7
Indiv Controls	yes	yes	yes	yes	yes	yes	yes
Level 1* Level 2 Interactions							
ALMP[1]	0.548*						
OLM * ALMP	0.245						
Emp * ALMP	0.705***						
Past Un*ALMP	-0.131						
PLMP expend[1]		0.263					
OLM*PLMP		0.196					
EMP * PLMP		0.667***					
Past un * PLMP		-0.0812					
EPL reg contract[1]			-0.308				
OLM*EPL regular			-0.203				
EMP* EPL regular			-0.567***				
Past un* EPL regular			0.207				
EPL temp contract[1]				0.254			
OLM * EPL Temp				-0.225			
Emp * EPL temp				-0.470***			
Past un* EPL Temp				0.155			
% feel insecure[1]					-1.349***		
OLM* % feel insecure					0.347*		
Emp* % feel insecure					0.194		
Past un*% feel insecure					0.234*		
Unemp rate (5yr mean)[1]						-0.713**	
OLM* un rate						0.292	
Emp*un rate						-0.0163	
Past un* Un ratex						0.146	
Union Density[1]							0.681**
OLM* UD							-0.197
Emp *UD							0.241
Past un* UD							0.141
Constant	5.713***	5.815***	6.380***	6.142***	6.384***	6.290***	5.741***
Observations	23,263	23,263	23,263	23,263	23,263	23,263	23,263

1 Models include all individual level controls listed in table 2

2 The main effect for the institutional variables is the effect for the unemployed who are the reference group

*** p<.01, ** p<.05 , *p<.10

Table A8: Under 35 Years: Interactions between Personal Employment Status by Institutional Factors – with those Outside the Labour Market as Reference Group

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Individual controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ALMP[1]	0.793***						
unem * ALMP	-0.245						
Emp * ALMP	0.460***						
Past Un*ALMP	-0.131						
PLMP expend[1]		0.459*					
Unem *PLMP		-0.196					
Emp * PLMP		0.472***					
Past un * PLMP		-0.0812					
EPL reg contract[1]			-0.511				
Unem*EPL regular			0.203				
Emp * EPL regular			-0.365***				
Past un* EPL regular			0.207				
EPL temp contract[1]				0.0295			
Unem * EPL Temp				0.225			
Emp * EPL temp				-0.245**			
Past un* EPL Temp				0.155			
% feel insecure[1]					-1.002***		
Unem* % feel insecure					-0.347*		
Emp* % feel insecure					-0.153		
Past un*% feel insecure					0.234*		
Unemp rate (5yr mean)[1]						-0.422	
Unem * un rate						-0.292	
Emp*un rate						-0.308***	
Past un* Un ratex						0.146	
Union Density[1]							0.484**
Unem * UD							0.197
Emp *UD							0.438***
Past un* UD							0.141
Constant	5.713***	5.815***	6.380***	6.142***	6.384***	6.290***	5.741***
Observations	23,263	23,263	23,263	23,263	23,263	23,263	23,263

1 Models include all individual level controls listed in table 2

2 The main effect for the institutional variables is the effect for the OLM who are the reference group

*** p<.01, ** p<.05 , *p<.10