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Overcoming early job-insecurity in Europe

Consequences of early job insecurity and the role of the welfare state

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Abstract

The detrimental effect of joblessness on individual wellbeing is relatively well recognized (usually in the context of Western economies) as an additional, non-pecuniary cost of unemployment. However, the strength of the relationship between the employment status and life satisfaction varies considerably among countries. Relatively little is known about what forces drive these discrepancies, especially in the group of young people. The aim of the proposed paper is to identify the contextual factors influencing the strength of the relationship between the employment status and the level of individual wellbeing. In particular we are interested in the role of four policy fields: education policy, employment protection, passive and active labour market policy. In the empirical part of the paper we use data from two waves of the European Social Survey and apply the random intercept model. We find that vocationally oriented and tracked education systems as well as generous active and passive labour market policies strengthen the employment-wellbeing relationship.

Introduction

Early job insecurity can lead to a number of negative consequences including poverty, delayed family formation, health problems, reduced subjective well-being, and increased probability of risky behaviours. In this paper, we focus on the impact of unemployment on well-being (proxied by declared life satisfaction) of young people in Europe. Building on the previous study (Buttler et al. 2016), we apply the comparative approach to investigate how various welfare state policies moderate the consequences of early job insecurity. The selection of the relevant contextual factors was based on the analysis conducted by Hora, Horakova and Sirovatka (2016). They distinguished four policy fields/features which might affect the incidence of early job insecurity and the patterns of labour market entry of young individuals: education policy, employment protection, active labour market policy, unemployment protection. In the empirical part of the analysis we use the micro-level data from the European Social Survey as well as the set of macro-level variables. We apply a three-level random intercept model in order to identify the moderating effects of the policy fields/features on the relationship between employment status and wellbeing. In other words we try to understand what policy fields/features can be responsible for the fact that in some countries the difference in life satisfaction between young employees and unemployed is large and in the others small or even negligible. The key concept which helps us to interpret this cross-country variation is the quality of work.

The remainder of this paper is organized as follows. Section 2. describes the relationship between employment status and wellbeing at the micro level and identifies the policy fields/features which can moderate this association. Section 3. presents the empirical strategy, describes the model, the sample, as well as the micro- and macro-level variables. Section 4. contains the results of the empirical analyses describing the moderating effects of employment quality, policy fields/features and economic conditions. It presents also the gender-sensitive analysis. Section 5. concludes.

Unemployment and wellbeing

The micro perspective

The relationship between individual employment status and wellbeing (usually proxied by the declared level life satisfaction or happiness) is very well documented in the sociological, psychological and economic literature (Bell and Blanchflower, 2009; Dooley and Prause, 2004; Harrison et al., 2016; Kapteyn et al., 2015; McKee-Ryan et al., 2005; Winkelmann and Winkelmann, 1998; Russell et al., 2015; Tøge and Blekesaune, 2015; Winkelmann, 2009; Dolan et al., 2008). The detrimental effect of unemployment on wellbeing has a strong empirical support and in was frequently confirmed with the use of data from many countries i.e. Germany (Frijters et al., 2004; Winkelmann and Winkelmann, 1998), Switzerland (Frey and Stutzer, 2000), United Kingdom (Clark, 2003; Clark and Oswald, 1994; Bell and Blanchflower, 2010; Bell and Blanchflower, 2011; Thomas et al., 2005), other non-European countries (McKee-Ryan et al., 2005; Mckenzie et al., 2014).

We can distinguish two main channels through which the employment- wellbeing relationship is established. There exists a direct psychological effect of a job loss on life satisfaction or happiness. The state of unemployment deprives individuals of intangible benefits related to professional work, e.g. of using and developing own skills, achieving social status, maintaining interpersonal contacts, etc. The second channel of employment-wellbeing relationship is mediated through income. These two effects influence jointly the individual's wellbeing. However, in this paper we are mainly interested in the estimation of the direct psychological effect.

There are few methodological challenges when it comes to estimation of the employment-wellbeing relationship. There were described in detail elsewhere (Buttler et al. 2016).

The macro perspective

The quality of employment

In our analysis the central concept used to understand the cross-country variation in employment-wellbeing relationship is the employment quality. In his seminal work, Duncan Gallie distinguished five main dimensions of employment quality: skill use at work, the level of autonomy at work (task discretion), the opportunities for skill development, job security and the level of work-family balance (Gallie 2007:6). It might be surprising that a seemingly important dimension of employment quality – the level of salary – is not a part of the abovementioned list. As it was emphasized by Gallie:

*"*This is partly a definitional issue, with the notion of "job" focusing primarily on the intrinsic characteristics of work experience in contrast to "conditions of employment" which are concerned with the extrinsic features of work" (Gallie 2007: 6).

Since in this paper our focus is on the direct psychological effect of (un)employment on well-being we will not consider a material remuneration as the separate dimension of employment quality.

We consider the concept of employment quality as a useful analytical tool for two reasons. Firstly, it helps to look at the relationship between employment and well-being from a different perspective. Most studies investigating this link are focused on the detrimental effect of a job loss on well-being, hence they explore the unemployment-wellbeing relationship. The employment-wellbeing relationship can be regarded as the other side of the coin (the most popular empirical strategy relies on comparisons of wellbeing between employees and unemployed). However, rephrasing the subject of the analysis in this way helps to discover the other aspect of this relationship. The intrinsic characteristics of jobs (hence job quality) potentially moderate the association between employment and wellbeing. There is a relatively rich evidence base confirming this moderating effect, although mainly with respect to the particular dimension of employment quality – job security (see e.g. Chadi and Hetschko 2016, Millán et al. 2011, Silla et al. 2009, Voßemer et al. 2017). It is fully justified, however, to expect that also the other dimensions of employment quality determine how large is the psychological gain from professional work.

Secondly, the concept of employment quality is often used in the context of employment regimes. There are three ideal types of such regimes: inclusive, dualist and market. In the inclusive regime strong and organized trade unions act in favour of a high level of employment. As a result, a relatively 'tight labour market will strengthen employees' power at workplace level, will be conducive to greater participation at work and will broaden concern about the quality of work' (Gallie, 2007:18). In the inclusive regimes, the level of unemployment protection is high with developed passive and active labour market policies. The dualist employment regimes are similar, however, with stronger division between core and peripheral segments of the labour market. As a result, 'the nature of employment regulation will tend to reflect this providing strong employment protection, good employment conditions, and generous welfare support for the core workforce, but much poorer conditions for those on non-standard contracts' (Gallie, 2007:19). Finally, in market regimes the position of the organized labour is relatively weak and the main coordinating mechanism is the labour market. The employment quality and work conditions depend on the bargaining process at the

company level. Less recognized types are concern Mediterranean and transitional countries. The concept of employment regimes overlaps in many areas with other similar typologies like production regimes, flexicurity regimes, transitional regimes, welfare regimes. Therefore it serves is an useful analytical tool if we want to take the international comparative perspective and investigate how various welfare state policies moderate the consequences of early job insecurity.

The role of the welfare state

The most important institutional features which could moderate the consequences of early job insecurity were identified by Hora, Horakova and Sirovatka (2016) who recognized the role of four policy fields/features – education, employment protection, active labour market policies and activation, unemployment protection – shaping the process of school-to-work transition. Education and employment protection were further analysed by Buttler et al. (2016) as possible factors influencing the relationship between employment and wellbeing. In this paper, we study the moderating role of the selected measures belonging to these four policy fields with respect to the relationship between employment status and wellbeing.

In the field of *educational policy,* we distinguish three parameters that can moderate the relationship between employment and wellbeing: standardisation, stratification and vocational orientation. The first dimension refers to the scope of nationwide standards of the education quality. In our case we are particularly interested in the role of school-leaving examinations (so called standardisation of output). The second dimension – stratification – characterises the selectivity of tracking system in education. High level of stratification describes education systems in which students are selected into tracks at early stages, where the tracks differ in terms of curricula and the mobility between them is limited. The third dimension – vocational orientation – refers not only to the 'popularity' of vocational tracks but also to their quality (whether vocational education is school-based only or includes also the practical training at the workplace – so called dual apprenticeship system). Elsewhere (see Buttler et al. 2016) we presented the empirical findings from other studies suggesting that standardized, stratified and vocational orientated education systems increase the education-job match (e.g. because such systems send relatively good signals to the employers about graduates' competences) increasing the employment quality and wellbeing of employees. On the other hand high levels of standardization, stratification or vocational orientation should have no or even negative impact on wellbeing of unemployed. In such education systems the graduates often enter employment directly from schools making it more difficult to find a job through the labour market (as unemployed). In sum, high levels of stratification, standardization or vocational

orientation should increase the wellbeing divide between young unemployed and employees.

In the field of *employment protection* we consider two further parameters: the strength of organized labour (operationalized with the use of two indices – trade union density and the collective bargaining coverage) and the level of employment protection legislation. As summarized in Buttler et al. (2016) the strength of organized labour with its ability to influence the work-related policies is the crucial force shaping the type of employment regime. The employment regimes differ with respect to such characteristics as the scope of initial and continuing vocational education as well as work and employment integration policies (see Gallie, 2007: 20-32). All these features determine also the employment quality. We expect that the stronger the organized labour the higher the wellbeing of employees and unemployed. From this reason the direction of the moderating effect can vary. It will strengthen the employment-wellbeing relationship only if wellbeing of employees will be more affected by the strength of organized labour than wellbeing of unemployed.

At the first glance the level of employment protection should influence positively at least one dimension of employment quality – job security – strengthening the employment-wellbeing relationship. It exists a modest evidence confirming this hypothesis. Boarini et al. (2013) using the dataset from Gallup World Poll discovered a positive impact of employment protection legislation on life satisfaction but only in the subgroup of workers. Among unemployed the effect was not significant. On the other hand Ochsen and Welsch (2012) using the data form Eurobarometer did not find any moderating effect. The other strand of research (e.g. Breen 2005, Wolbers 2007) emphasizes that school-to-work transition is less smooth in countries where the employment protection is high since the employers are afraid to hire inexperienced candidates. As a consequence young persons may accept any job which has potentially a detrimental effect on employment quality and the employment-wellbeing relationship. The school-to-work transition is usually smoother in countries where high level of employment protection coincides with a vocationally orientated education system. In such circumstances the reluctance of employers to hire unexperienced candidates will be reduced by informative signals about graduates' competences sent by the education system. To sum up, the direction of the moderating effect of employment protection on the employment-wellbeing relationship is unclear, however, it should be positive in countries where a high level of employment protection coincides with a vocationally oriented system of education.

In the field of the *active labour market policy* (ALMP) we study the moderating effect of ALMP spending. In the existing research (see e.g. Wulfgramm 2014) it is hypothesized that ALMP reduces the detrimental effect of unemployed on wellbeing by imitating a regular job

(e.g. a training program, a popular ALMP measure, provides participants with similar work by-products as a regular job: a structured day, opportunities for mastery and creativity, shared experiences). However, the empirical support for such hypothesis is weak and there exist studies providing evidence for the opposite effect, i.e. that a generous ALMP makes the difference in wellbeing between employed and unemployed even larger (see Voßemer et al. 2017). The natural explanation for this finding is that the generous ALMP policy increases not only the wellbeing of unemployed but also the wellbeing of employees. The effective ALMP may have the same qualities as a vocational education – it improves the job-skill match and – as a consequence – the quality of employment. Therefore the direction of the moderating effect of ALMP on wellbeing may vary depending on which group, unemployed or employees will be more affected.

In the field of *unemployment protection* we analyse the moderating role of the generosity of spending on passive labour market policy (PLMP). Also in this case the existing literature focuses on the impact of PLMP on unemployed. It is claimed that unemployment benefits improve wellbeing of unemployed by reducing the loss of income. However, we can expect that the generous PLMP improves also the wellbeing of employees because it gives the comfort to search for a 'good job' instead of 'any job'. In this paper we are interested in a direct psychological effect of a job loss on wellbeing and not the indirect effect caused by reduced income. Therefore we expect that the generous PLMP could increase more wellbeing of employees than unemployed and strengthen the employment-wellbeing relationship. Such expectation is supported by the results of Boarini et al. (2013) who indicated a positive association between the level of unemployment protection (proxied by the replacement rate) and life satisfaction but only in the subgroup of workers. However, there exist also studies which have not identified such effect (see Eichorn 2014) or which have even found the opposite moderating effect (Ochsen and Welsch 2012). The expected effects of discussed policy fields/features on the strength of the employment-wellbeing relationship are summarized in Table 1.

Table 1. Policy features and their moderating effects on the employment-wellbeing relationship

Policy field/Features	Impact on wellbeing of unemployed	Impact on wellbeing of employees	direction of the moderating effect (strength of the employment-wellbeing rel.)
educational policy			
Standardization	**0/-**	+	+
stratification (tracking)	**0/-**	+	+
vocational orientation	**0/-**	+	+
employment protection			
employment protection	**-**	+/-	+/-
employment protection and high vocational orientation	**-**	+	+
trade union density	+	+	+/-
collective bargaining coverage	+	+	+/-
unemployment protection			
PLMP spending	**0**/+	+	+
active labour market policies			
ALMP spending	+	+	+/-

The empirical strategy

Data and variables

The micro-level variables

In the study we use the (micro-level) variables from the European Social Survey. The dependent variable in the model is derived from the question 'how satisfied are you with your life as a whole nowadays?' and takes values from 0 (extremely dissatisfied) to 10 (extremely satisfied). The set of independent variables was selected based on the literature review presented elsewhere (see Buttler et al. 2016). The most important independent variable proxies the employment status (a binary variable which takes a value of '1' if a respondent worked as an employee and '0' if a respondent was unemployed. The respondents with other employment status categories were excluded from the analysis). It should be emphasized that by controlling for household income (the assessment of a household financial situation) the estimated employment-wellbeing relationship refers to the direct, non-pecuniary effect of economic activity. Besides, at the micro level we control for: disability status, migration status, past unemployment, the level of education, the household composition (being parent, being married or in a partnership, being family head), age, sex and time.

The employment quality variables

The special module on employment quality in European Social Survey was conducted twice –

in years 2004 and 2010. In both waves these participants who were employed were asked few batteries of questions referring to different aspects of employment quality. Based on these individual-level answers we constructed four country-level indices of employment quality. The computation of these variables proceeded as follows. At the initial stage, the principal component analysis was conducted in order to identify the dimensions of employment quality. PCA revealed three clusters of employment quality variables. We decided to extract the fourth dimension – employment security – since this aspect of employment quality was well recognised in the literature. The final clusters with corresponding variables are presented in Table 2. Next, the employment quality variables were rescaled so that the higher value expressed the higher level of employment quality. Subsequently, in each dimension of employment quality the variables were summed for each individual creating four synthetic indices of employment quality. In the last step these variables were aggregated to the country-year level (arithmetic means) and standardized.

Table 2. The list of employment quality variables

dimension of employment quality	**related variables in ESS**
skills use at work	task variety at work good opportunities for advancement job requires learning new things
autonomy at work	can decide time start/finish work allowed to influence policy decisions of organisation allowed to decide how daily work is organised allowed to choose/change pace of work
job security	my job is secure
work-life balance	worry about work problems when not working job requires work very hard too tired after work to enjoy things like do at home never enough time to get everything done in job job prevents you from giving time to partner/family

The macro-level variables

The values of macro-level variables correspond to the years when ESS employment quality modules were organised (2004, 2010). The only exception were standardization and stratification indices. These variables come from the original database created by Bol and Van der Werfhorst (2012) and were created with the use of the data from years 2004-2006. As a consequence these two variables have the same values in 2004 and 2010 for a given country. We assume, however, that the features of educational systems do not change much within a

period of few years and we do not lose much variability. The description of macro-level variables is presented in Table 3.

Table 3. Macro – level variables. Operationalization of policy features

Policy field/Features	**Description of variables (Source)**
educational policy	
standardisation	standardization of output index: a dummy variable indicating whether in a country exists the curriculum based central exit exam (Bol and Van der Werfhorst 2012)
stratification (tracking)	tracking index based on three subindices (1) the age of first selection, (2) the percentage of the total curriculum that is tracked, (3) the number of tracks that are available for 15-year-olds (Bol and Van der Werfhorst 2012)
vocational orientation	share of vocational students in upper secondary education (OECD)
	share of students in dual tracks (OECD)
employment protection	
employment protection	index of employment protection legislation (OECD)
trade union density	share of workers who are trade union members (OECD)
collective bargaining coverage	share of workers to whom a collective bargaining agreements apply (OECD)
unemployment protection	
passive LM policies	spending on unemployment benefits as a share of GDP/unemployment rate 25-65 (OECD)
active labour market policies	
active LM policies	spending on labour market programs as a share of GDP/unemployment rate 25-65 (OECD)
control variables	
unemployment rate	unemployment rate 25-65 (OECD)
GDP per capita	GDP per capita, US Dollars, PPPs (OECD)

Sample and Methods

In the empirical part of the analysis we apply the three level random intercept model following the recommendations of Schmidt-Catran and Fairbrother (2016). In this multilevel setting the individuals are nested in country-years and countries. This model can be written as follows.

$$y_{jti} = \beta_0 + X_{jti}\beta_p + \beta_e E_{jti} + Z_{jt}\beta_q + E_{jti}Z_{jt}\beta_{pe} + v_j + u_{jt} + e_{jti}$$

where:

y_{jti} : wellbeing proxy: how satisfied are you with your life as a whole? (0-10)

E_{jti} : employment status variable: 1 – employee, 0 – unemployed, other – excluded

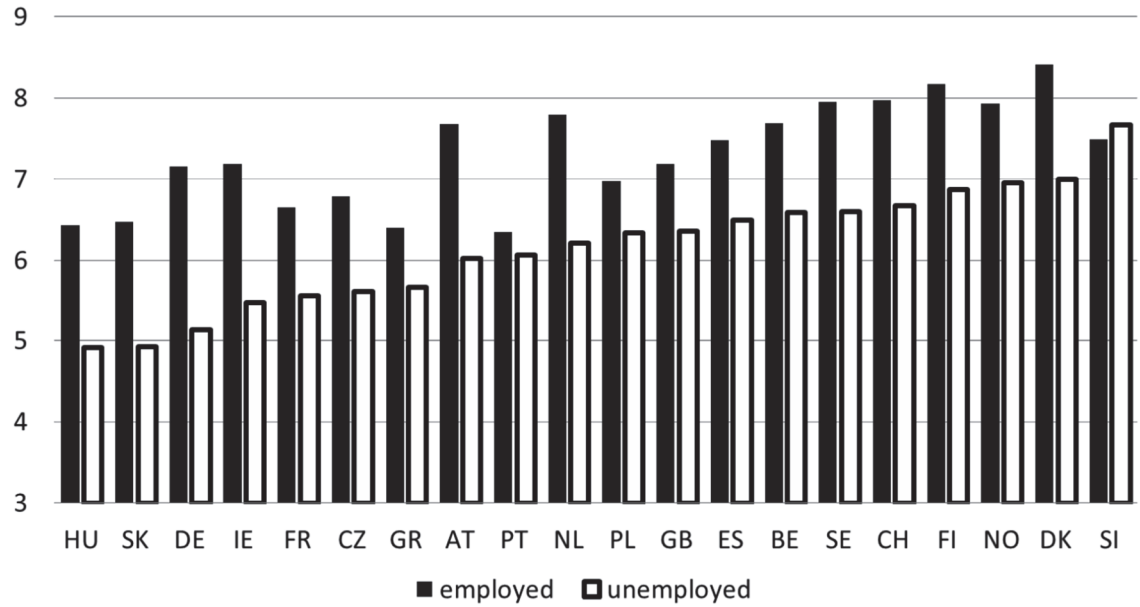
X_{jti} : set of individual level control variables: disability status (0-1), migration status (0-1), good household financial situation (0-1), past unemployment (0-1), the level of education (primary, secondary, tertiary), the household composition: being parent (0-1), being married or in a partnership (0-1), being family head (0-1), age, sex, year

Z_{jt} : set of country-year-level variables

v_j ; u_{jt}; e_{jti} : error terms at country, country-year, individual level

Despite the fact that the dependent variable is ordinal, we treat it as the interval one, following the recommendations of Ferrer-i-Carbonell and Frijters (2004) and estimate the linear model. The most important parameter to be estimated is β_{pe}. The positive value of this coefficient indicates a larger wellbeing divide between employed and unemployed and stronger employment-wellbeing relationship. The negative value of this coefficient suggests that a particular macro-level factor reduces the differences between employed and unemployed in declared wellbeing. Since in our analysis we focus only on economically active individuals (employed and unemployed) the estimate of the parameter β_q has also an interesting interpretation. It measures the general effect but in fact it shows also the influence of a given macro factor (the institutional feature, the policy) on the group of unemployed since they constitute the reference category denoted as '0'.

Figure 1. The average wellbeing of employed and unemployed (aged 35 and less) in analysed countries (based on the declared level of life satisfaction, 0-10)



N=10 946

In our analysis we focus on economically active individuals aged 35 and less from two waves of European Social Survey (2004, 2010). The final sample consists of 10 946 individuals from 20 countries. Since not every country participated in both waves of the study in our sample, we have 35 country-years. Descriptive statistics of micro- and macro-level variables are presented in the appendix (tables A2-A4).

The Figure 1. presents the comparison of average life satisfaction between employees and unemployed in countries under scrutiny. The calculations were made for the same sample which was used in the regression analysis (observations from both waves, 2004 and 2010 were pooled). As we can see countries differ significantly not only with respect to the general level of wellbeing of employees and unemployed but also with respect to the employment - wellbeing relationship, e.g. in German-speaking counties the differences in declared life satisfaction are large and much smaller, almost negligible in some mediterranean countries like Greece or Portugal.

Results

In the empirical part of the analysis we compare different specifications of the linear random intercept model which have the same sets of micro-level variables specified in the section 'Sample and methods' and differ only with respect to the macro-level variables (a proxy for a given policy feature and its interaction term with the employment status variable). We add only one macro-level variable at a time given a relatively short list of analysed countries. In such circumstances adding to many context variables could result in biased estimates (see Chung 2016, Stegmueller 2013). As robustness checks we rerun these models adding two macro-level proxies for the overall state of the economy: the unemployment rate and GDP per capita.

Employment quality

Out of four described dimensions of employment quality only two, opportunities to use and develop skills at work and autonomy at work, have the expecting moderating effect on the employment-wellbeing relationship. In countries where on average jobs rank high on these dimensions the life satisfaction divide between employees and unemployed is larger. It is surprising that the moderating effect of employment security is statistically insignificant – the role of this dimension of employment quality is well recognized in the literature. It seems also surprising that the three abovementioned dimensions have a positive general impact on wellbeing of both employees and unemployed (these effects remain statistically significant even when we control for unemployment rate and GDP per capita).

Table 4. Country-level employment quality and the employment-wellbeing relationship

	skills	autonomy	security	balance
employed	0.582***	0.569***	0.564***	0.553***
main effect (macro factor)	0.238***	0.326***	0.314***	0.024
macro factor*employed	**0.137*** **	**0.091***	**0.064**	**-0.027**
VPC (country level)	4.36%	3.23%	3.59%	7.72%
N (individuals)	10 946	10 946	10 946	10 946
N (country-years)	35	35	35	35
N (countries)	20	20	20	20

***p<0.01, **p<0.05, *p<0.1, in all model specifications the set of independent variables was included as described in section 'Sample and methods'

It should be emphasised, however, that the dimensions of employment quality are the effects of the interaction of social forces. They are rather endogenous variables that might be correlated – as was hypothesised in the previous chapter – with contextual factors or policy features. For example Table 5. shows that the level of skills use at work is much higher in countries with vocationally oriented education. Both passive and active labour market policies are strongly and positively related to most of the employment quality dimensions (excluding work-life balance). At this stage two groups of correlations have unexpected signs. It is difficult to explain why educational tracking should be negatively associated with two employment quality domains. At the first glance also the negative correlation between the employment protection and employment quality domains seems surprising. However, in the previous chapter we already discussed the ambiguous role of the employment protection in the process of school-to-work transition.

Table 5. Relationships between dimensions of employment quality and policy features

policy fields/features	**Indices**	**pairwise correlations**			
		skills	**autonomy**	**security**	**balance**
educational policy	dual voc. Education	0.408	0.174	0.105	-0.054
	vocational education	0.506	0.268	0.145	-0.193
	Tracking	0.017	-0.330	-0.324	0.014
	Standardization	0.249	0.011	-0.031	-0.027
PLMP	unep. protec. Spending	0.353	0.501	0.380	0.073
ALMP	ALMP spending	0.564	0.696	0.558	0.133
employment protection	employment protect.	-0.416	-0.197	-0.408	0.185
	barg. Coverage	0.119	0.483	0.219	-0.094
	barg. density	0.322	0.583	0.427	-0.011

N=35

The role of the welfare state

The estimated coefficients presented in Table 6. suggest that many features of the education policy have a statistically significant moderating effect on the employment- wellbeing relationship. As expected, in countries with vocationally orientated, highly tracked and standardized education systems, the wellbeing divide between employees and unemployed is larger. However, the later effect (standardization) is not statistically significant. The estimated main and moderating effects are robust to changes in model specifications (i.e. controlling for GDP per capita and unemployment rate does not change much the magnitude and statistical significance of the estimated coefficients).

Table 6. Policy features and the employment-wellbeing relationship (education policy, PLMP, ALMP)

	dual	vocational	tracking	stand. out	PLMP	ALMP
employed	0.587***	0.571***	0.559***	0.461***	0.572***	0.578***
main effect (macro factor)	-0.009	-0.001	-0.335***	-0.286	-0.002	0.189**
macro factor*employed	**0.276*** **	**0.135*** **	**0.187*** **	**0.154**	**0.171*** **	**0.144*** **
VPC (country level)	7.46%	7.14%	6.78%	7.59%	6.57%	4,62%
N (individuals)	10 946	10 946	10 946	10 946	10 946	10 946
N (country-years)	35	35	35	35	35	35
N (countries)	20	20	20	20	20	20

***p<0.01, **p<0.05, *p<0.1, in all model specifications the set of independent variables was included as described in section 'Sample and methods'

In accordance with the expectations, in countries with generous passive and active labour market policies the relationship between employment and wellbeing was stronger. At the first glance the direction and the magnitude of the main effects also meet the expectations. In countries where spending on the ALMP is high, unemployed declare on average higher life satisfaction. Such relationship is not observed when PLMP is considered. In section 'the role of the welfare state' we predicted such relationship claiming that unemployment benefits do not reduce the negative psychological effect of job loss on well-being. However, when we run the same model without controlling for income, the main effect of PLMP on well-being remains small and statistically insignificant. Besides, the main effects of both PLMP and ALMP on well-being disappear when we control for the economic conditions in the country (GDP, unemployment). However, the moderating effects remain positive and statistically significant, which is in line with the argumentation that passive and active labour market policies increase the quality of employment due to the better job-skill match.

Table 7. Policy features and the employment-wellbeing relationship (employment protection)

	protect	barg. cov.	barg. density
employed	0.555***	0.556***	0.559***
main effect (macro factor)	-0.054	0.009**	0.009*
macro factor*employed	**-0.126*** **	**0.071**	**0.088***
VPC (country level)	7.09%	5.73%	4.09%
N (individuals)	10 946	10 946	10 946
N (country-years)	35	35	35
N (countries)	20	20	20

***p<0.01, **p<0.05, *p<0.1, in all model specifications the set of independent variables was included as described in section 'Sample and methods'

The estimation of the moderating effect of the employment protection to some extend confirmed our predictions. In general, in countries with stricter employment protection legislation the difference in wellbeing between unemployed and employees was smaller. It could reflect the mechanism mentioned in the previous chapter that in the circumstances of high employment protection employers are afraid to hire unexperienced candidates. Under such unfavourable conditions, young unemployed can accept any job even such of low quality. The estimated moderating effect was reduced in countries where high employment protection coincided with vocationally oriented education system. We estimated this by incorporating in the model a three-term interaction effect (which included also the share of vocational students, the results of this model are not reported here). The strength of organized labour, according to our expectations, influenced positively the wellbeing of both employees and unemployed. However, this effect became statistically insignificant when control variables were taken into account.

The role of the economic conditions

In the literature there is no clear evidence what impact the economic conditions have on the wellbeing divide between employed and unemployed. Di Tella, MacCulloch and Oswald (2001) analysing data for US indicated that the adverse economic conditions proxied by high unemployment and inflation rates (co called 'misery function') decrease wellbeing of both employees and unemployed. Using the dataset from ESS Wulfgramm (2014) came to similar conclusions. She found that wellbeing was positively correlated with GDP per capita and negatively with the unemployment rate. Boarini et al. (2013) indicated that the unemployment rate had larger negative effects on unemployed than employees. Similar results reported

Calvo, Mair and Sarkisian (2015). The estimates suggesting that the adverse economic conditions increase the wellbeing divide between employees and unemployed were interpreted as follows: when country-level unemployment is high, working becomes a survival strategy, studying becomes a delaying and avoiding strategy, being a homemaker becomes an insecure survival strategy, and retiring becomes a disguising strategy. Each of these strategies likely has implications for life satisfaction. Thus, based on the contextual adaptation theory we developed here, we expect that as unemployment rates rise, the unemployed get hit the hardest, followed by retirees, homemakers, workers, and students." (Calvo, Mair and Sarkisian 2015: 1634)

However, there exist results suggesting that the moderating effects of economic conditions might have the opposite direction. For example Scherer (2009) in the analysis of ESS data discovered that in the circumstances of high unemployment, there was no difference in life satisfaction between temporary and permanent employees. According to her:

"a possible interpretation suggests that this involves a lowering of expectations as they find themselves content to at least have a job, given the threat of unemployment." (Scherer 2009: 542)

The abovementioned 'lowering of expectations' can also be extended to the group of unemployed. Under the adverse economic conditions they might suffer less from joblessness because they observe that the problem of unemployment concerns the larger share of the society.

We tested the potential moderating effect of economic conditions by estimating four specifications of the regression model with the set of micro-level regressors specified in the section "Sample and methods". The specifications differed with one proxy for economic conditions (GDP per capita, GDP growth, lagged GDP growth, the general unemployment rate) and their interaction terms with the employment status variable. The results presented in Table 7. suggest that the general wellbeing (regardless of the employment status) was negatively affected by the unemployment rate and positively by the level of economic development (GDP). The only moderating effects concerned the economic growth, which increased the wellbeing divide between unemployed and employees. This finding is to some extend in line with conclusions of Calvo, Mair and Sarkisian (2005), however, their results referred to the unemployment rate, not the economic growth.

Table 8. Employment-wellbeing relationship and economic conditions.

	Gdp	growth	growth lagged	unemp.
employed	0.564***	0.569***	0.555***	0.555***
main effect (macro factor)	0.208**	-0.014	-0.095	-0.179**
macro factor*employed	**0.075**	**0.136*** **	**0.086*** **	**-0.020**
VPC (country-level)	5.01%	7.55%	7.72%	6.09%
N (individuals)	10 946	10 946	10 946	10 946
N (country-years)	35	35	35	35
N (country)	20	20	20	20

***p<0.01, **p<0.05, *p<0.1, in all model specifications the set of independent variables was included as described in section 'Sample and methods'

Gender differences and employment quality

The fact that the employment-wellbeing relationship is stronger among men is well documented. According to the social production function theory, especially for men professional work is a main way to achieve social status (Van der Meer 2014). The results of regression models run separately for men and women confirm it.

Table 9. The employment-wellbeing relationship and dimensions of employment quality. Women aged 35 and less

	skills	autonomy	security	balance
employed	0.541***	0.501***	0.564***	0.553***
main effect (macro factor)	0.245**	0.391***	0.351***	-0.003
macro factor*employed	**0.166** **	**0.036**	**0.055**	**0.037**
VPC (country level)	4.24%	3.33%	3.64%	8.04%
N (individuals)	5 262	5 262	5 262	5 262
N (country-years)	35	35	35	35
N (countries)	20	20	20	20

***p<0.01, **p<0.05, *p<0.1, in all model specifications the set of independent variables was included as described in section 'Sample and methods'

As shown in Tables 9. and 10. the coefficient of employment status has a higher value in the subgroup of men. Since there are gender differences with respect to job preferences, we wanted to check whether the moderating effects of employment quality dimensions differ between men and women. Although we did not find any moderating effects with respect to

work-life balance and job security in the general sample, we could expect these effects in the subgroup of women. The results of the regression analysis presented in Table 9. do not support these expectations. We cannot observe any interesting gender differences.

Table 10. The employment-wellbeing relationship and dimensions of employment quality. Men aged 35 and less

	skills	autonomy	security	balance
employed	0.625***	0.629***	0.617***	0.614***
main effect (macro factor)	0.227**	0.272***	0.268***	0.033
macro factor*employed	**0.098**	**0.128***	**0.071**	**-0.078**
VPC (country level)	3.32%	2.96%	3.34%	7.33%
N (individuals)	5 702	5 702	5 702	5 702
N (country-years)	35	35	35	35
N (countries)	20	20	20	20

***p<0.01, **p<0.05, *p<0.1, in all model specifications the set of independent variables was included as described in section 'Sample and methods'

Conclusions

In this paper we tried to identify the macro-level factors responsible for the fact that in some countries the difference in life satisfaction between young employees and unemployed is large and in the others small or even negligible. In particular, we analysed the moderating role of the cross-country variation in employment quality and four policy fields: education policy, employment protection, active labour market policy and passive labour market policy/unemployment protection.

The results showed that at least two dimensions of employment quality – the opportunities to use and develop skills at work and work autonomy – have a positive moderating effect on the employment-wellbeing relationship. In other words, in countries where on average jobs rank high on these dimensions the life satisfaction divide between employees and unemployed is large.

Most of the analysed policy fields/features had the expected moderating effects on the employment-wellbeing relationship. In countries with more vocationally oriented and stratified education systems, the difference in wellbeing between employees and unemployed was larger. This finding is in line with the explanation that such systems improve the education-job match and employment quality.

Similar moderating effects were observed with respect to active labour market policies. According to our expectations in countries with more generous spending on ALMP life satisfaction of both unemployed and employees was on average higher. Since life satisfaction of employees was affected more, the moderating effect strengthened the employment-wellbeing relationship. A similar pattern was observed with respect to passive labour market policies/unemployment protection. However, a higher level of spending on unemployment benefits positively affected only life satisfaction of employees. It is not surprising, since better unemployment protection gives the comfort to search for a 'good job' instead of 'any job'. The fact that the group of unemployed remained unaffected can be better understood when we realise that our focus was on the direct psychological effect of unemployment on life satisfaction and not the effect mediated through the reduced income. Besides, our sample consisted of young people who often are not eligible for unemployment benefits due to short work histories.

A stricter employment protection legislation was associated with the lower wellbeing divide between employees and unemployed. This is in accordance with the findings of Breen (2005) or Wolbers (2007) who suggest that in countries where employment protection is high employers are afraid to hire unexperienced candidates. Under such unfavourable conditions young unemployed are more likely to accept any job even such of low quality. The negative moderating effect was reduced in countries where high employment protection coincided with a vocationally oriented education system. Such systems deliver good signals about the competences of graduates and can offset the negative effect of employment protection.

Contrary to other analyses, we did not find much evidence suggesting that the strength of employment-wellbeing relationship is affected by economic conditions. The only moderating effect was observed with respect to economic growth which increased slightly the life satisfaction divide between employees and unemployed. It can be attributed to the positive correlation between the economic growth and employment quality.

Policy recommendations

The impact of various policies and contextual factors on the quality of the school-to-work transition was analyzed from different perspectives. So far multiple effects of transition quality were taken into account including: horizontal and vertical education-to-job matching (Levels et al., 2014), youth unemployment rate (Breen, 2005; Wolbers, 2007, Bol and van de Werfhorst, 2013)), strength of the education-occupational status relationship (Lange et al., 2014; Shavit and Muller, 1998; Allmendinger, 1989), temporary employment incidence (Wolbers, 2007),

length of transition into first significant job (Wolbers, 2007), length of job search (Bol and van de Werfhorst, 2013), the average job tenure (Bol and van de Werfhorst, 2013), the sequence of school-to-work transition (Brzinsky-Fay, 2007)).

The present paper adds to this discussion by analyzing how different conditions of the labour market entry affect life satisfaction of young individuals (aged 35 and less). We analyzed this by comparing declared wellbeing of employed and unemployed youth from 20 European countries. In particular we were interested in the role of educational policy (education system), active and passive labour market policy and employment protection.

We discovered that young people from countries where the educational system was vocationally oriented and tracked (offering multiple educational tracks), young employees were on average more satisfied with life. The possible explanation for this relationship is that in such education systems young individuals more frequently perform work they are trained for, they can use their skills and experience more autonomy in the workplace.

A similar relationship was observed in countries with generous active and passive labour market policies. The effective ALMP (by utilizing such means as e.g. training schemes or employment subsidies) may have the same qualities as vocational education – it improves the job-skill match and – as a consequence – the quality of employment. On the other hand, the generous PLMP improves the wellbeing of employees because in the period of unemployment it gives them the comfort to search for a 'good job' instead of 'any job'.

The analysis presented in this paper suggests that the 'wellbeing gain' of employees can be treated as an additional element contributing to the efficiency of the labour market and educational policies. However, we should not forget about the other group of economically active individuals – the unemployed. With the exception of ALMP, the abovementioned policies contributed little to their wellbeing increasing the life satisfaction divide between employees and unemployed. Such discrepancies are potentially dangerous because they can harm social cohesion.

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Appendix

Table A1. Determinants of wellbeing (full specifications with proxies for employment quality)

	Model 1		Model 2		Model 3		Model 4	
variable	**coeff.**	**p-value**	**coeff.**	**p-value**	**coeff.**	**p-value**	**coeff.**	**p-value**
employed	0.582	0.000	0.564	0.000	0.553	0.000	0.569	0.000
unemployed in the past	-0.368	0.000	-0.365	0.000	-0.367	0.000	-0.369	0.000
satisfied with income	0.962	0.000	0.959	0.000	0.964	0.000	0.958	0.000
female	0.035	0.323	0.035	0.328	0.036	0.312	0.036	0.322
age	-0.084	0.062	-0.083	0.064	-0.083	0.065	-0.080	0.075
age2	0.001	0.229	0.001	0.231	0.001	0.237	0.001	0.259
education: primary	(ref.)		(ref.)		(ref.)		(ref.)	
education: secondary	0.178	0.001	0.193	0.000	0.188	0.000	0.190	0.000
education: tertiary	0.302	0.000	0.313	0.000	0.310	0.000	0.310	0.000
married	0.367	0.000	0.367	0.000	0.368	0.000	0.369	0.000
children	0.165	0.001	0.166	0.001	0.168	0.000	0.164	0.001
living with parents	-0.093	0.054	-0.091	0.059	-0.090	0.063	-0.084	0.081
migrant	-0.175	0.001	-0.180	0.001	-0.179	0.001	-0.174	0.001
disabled	-0.579	0.000	-0.580	0.000	-0.581	0.000	-0.581	0.000
employed*skills	0.137	0.007	0.000	0.000	0.000	0.000	0.000	0.000
skills	0.238	0.007	0.000	0.000	0.000	0.000	0.000	0.000
employed*security			0.064	0.179	0.000	0.000	0.000	0.000
security			0.314	0.000	0.000	0.000	0.000	0.000
employed*balance					-0.027	0.045	0.000	0.000
balance					0.024	0.092	0.000	0.000
employed*autonomy							0.091	0.059
autonomy							0.326	0.000
_cons	7.272	0.000	7.304	0.000	7.323	0.000	7.236	0.000
	N=10964		*N=10964*		*N=10964*		*N=10964*	

Table A2. Descriptive statistics, micro-level variables

Variable	Obs	Mean	SD	Min	Max
satisfaction with life	10946	7.081	2.064	0	10
employed	10946	0.833		0	1
unemployed in the past	10946	0.376		0	1
satisfied with income	10946	0.758		0	1
female	10946	0.48		0	1
age	10946	28.099	4.754	16	35
education					
primary and lower secondary	10946	0.184		0	1
upper secondary	10946	0.454		0	1
post-secondary and tertiary	10946	0.361		0	1
married	10946	0.316		0	1
children	10946	0.331		0	1
living with parents	10946	0.293		0	1
migrant	10946	0.127		0	1
disabled	10946	0.093		0	1

Table A3. Macro-level variables, mean unstandardized values, 2004

cntry	auton.	balance	security	skills	dual	voc	tracking	stand	almp	plmp	emp.pr	barg.cov.	density	gdp	u1564
AT	4,301	3,193	2,764	3,003	33,6	78,6	1,637	0	0,071	0,156	2,369	98	34,4	33659,8	5,9
BE	4,358	3,019	2,965	2,853	2,6	68,2	0,871	0	0,061	0,162	1,893	98	54	32273,58	7,4
CH	4,667	2,982	3,257	3,441	58,7	64,8	-0,239	0	0,132	0,209	1,595	48,7	19,5	38879,2	4,4
CZ	2,937	3,195	2,444	2,882	36,2	79,4	1,45	1	0,014	0,028	3,306	43,5	21	20761,35	8,3
DE	3,761	2,985	2,509	2,78	47	61,2	1,68	1	0,083	0,195	2,679	65,8	22,2	31848,8	10,8
DK	5,116	3,083	2,907	3,092	46,1	46,8	-0,941	1	0,247	0,353	2,135	85	70,4	32941,23	5,3
ES	4,096	3,132	2,787	2,608	3,8	38,7	-1,084	0	0,056	0,126	2,357	77,4	15,6	26236,92	11,1
FI	5,221	3,005	2,981	3,159	11,2	60,1	-0,941	1	0,073	0,133	2,167	91	71,5	31139,97	10,4
GB	4,477	2,86	3,123	2,905	0	71,5	-1,107	1	0,011	0,037	1,262	34,7	28,9	31637,59	4,6
GR	2,426	3,173	2,339	2,51	0	34	-0,561	0	0,012	0,037	2,802	85	24,5	25455,2	10,5
IE	3,445	3,127	3,17	3,043	0	33,5	-0,396	1	0,113	0,15	1,437	43,7	35,5	38724,6	4,6
NL	4,925	3,026	2,791	3,391	22,9	69,1	0,793	1	0,183	0,389	2,885	85	20,8	35453,34	4,7
NO	5,283	3,054	2,982	3,043	13,9	60,5	-1,107	1	0,147	0,102	2,333	75,1	55	42515,6	4,3
PL	3,247	3,072	2,414	2,889	0	49,5	-0,186	1	0,015	0,015	2,23	15,7	19	13351,3	19,4
PT	3,606	3,158	2,607	2,386	0	28,5	-0,42	0	0,076	0,152	4,417	42,9	21,4	21490,72	6,7
SE	5,058	2,976	2,87	3,036	0	53,4	-0,941	0	0,119	0,135	2,607	94	78,1	33551,82	6,8
SK	3,391	2,852	1,979	2,872	37,2	74,1	1,45	1	0,004	0,016	2,222	40	23,6	15170,44	18,6

Table A4. Macro-level variables, mean unstandardized values, 2010

cntry	auton.	balance	security	skills	dual	voc	tracking	stand	almp	plmp	emp.pr	barg.cov.	density	gdp	u1564
BE	4,045	2,961	3,030	2,942	3,1	73,0	0,871	0	0,067	0,135	2,083	96,0	53,8	40175,851	8,4
CH	4,365	3,073	3,293	3,328	60,6	66,2	-0,239	0	0,104	0,140	1,595	48,4	17,1	52728,480	4,7
CZ	2,710	3,077	2,127	2,606	31,9	73,1	1,450	1	0,028	0,046	3,052	50,1	16,3	27546,608	7,4
DE	4,394	2,963	2,950	2,839	45,5	51,5	1,680	1	0,073	0,149	2,679	59,8	18,6	39993,302	7,1
DK	5,169	3,086	2,911	3,088	45,3	46,5	-0,941	1	0,214	0,176	2,135	82,5	67,0	43088,059	7,6
ES	3,982	3,000	2,532	2,601	2,2	44,6	-1,084	0	0,038	0,144	2,357	78,7	17,6	31994,069	20,0
FR	4,358	2,885	2,606	2,763	12,2	44,3	-0,561	1	0,093	0,206	2,385	98,0	7,7	36056,660	8,9
GB	4,348	2,872	2,910	2,872	0,0	32,1	-1,107	1	0,009	0,037	1,262	30,9	26,4	35744,928	7,9
GR	2,662	2,912	1,917	2,512	0,0	30,7	-0,561	0	0,017	0,055	2,802	65,0	22,5	28202,723	12,9
HU	2,877	3,156	2,429	2,807	15,4	25,8	1,257	1	0,048	0,063	2,004	25,7	12,5	21466,574	11,3
IE	3,051	3,231	2,517	2,716	5,0	37,5	-0,396	1	0,052	0,174	1,270	36,0	32,7	43225,069	14,1
NL	4,921	3,037	2,949	3,228	20,9	67,0	0,793	1	0,164	0,322	2,821	89,6	18,6	44594,618	4,5
NO	5,102	3,145	3,274	3,168	15,3	53,9	-1,107	1	0,136	0,086	2,333	70,0	53,7	57998,847	3,6
PL	3,658	3,158	2,728	2,941	6,6	48,2	-0,186	1	0,061	0,023	2,230	14,8	14,6	20829,367	9,7
PT	3,403	3,082	2,282	2,430	0,0	38,8	-0,420	0	0,047	0,102	4,131	75,4	19,3	27360,982	11,4
SE	5,117	2,988	3,107	3,119	0,0	56,1	-0,941	0	0,095	0,076	2,607	90,0	68,2	41667,946	8,8
SI	3,802	3,095	2,850	3,433	0,0	64,6	0,006	1	0,053	0,086	2,651	80,0	25,0	27789,775	7,4

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