

NEGOTIATE

Overcoming early job-insecurity in Europe

Studying employers' risk assessment and the role of institutions: An experimental design

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Abstract

Work Package 7 aims at understanding how early job insecurity can affect an individual’s future career from an employer’s perspective. By paying special attention to the educational background and gender of the applicants, we plan to investigate how employers interpret young applicants’ job insecurity, for example in the form of unemployment or job-mismatch experiences, during recruitment. The negative effects of such experiences on an individual’s chances of being recruited successfully – so called scarring effects – may further vary depending on economic and institutional contexts such as country-specific economic or political conditions, educational structures or economic sectors. By surveying employers from different sectors, we will examine if and how these scarring effects vary between four different countries: Bulgaria, Greece, Norway and Switzerland. We will apply an innovative methodology in the form of an employer-sided survey with an integrated multidimensional vignette experiment in order to simulate the impact of multiple factors on success and failure when young people who experienced job insecurities apply for new jobs. In the present working paper we summarise the major theoretical concepts that have been used to explain the scarring effects that can result from employer behaviour. Moreover, we outline how we plan to collect data in WP 7 in order to analyse scarring through decision-making on behalf of employers during the recruitment process.

Content

1 Introduction	2
2 Theoretical considerations and state of research	3
2.1 Human capital theory.....	3
2.2 Signalling theory.....	4
2.3 Discrimination theories.....	5
2.4 National contexts of recruitment: Economy, employment regulation and educational system.....	6
3 Methodological approach	11
4 Empirical Research Plan of the employer survey	13
4.1 Sampling.....	13
4.2 Experimental variables (composing the vignettes/CVs)	15
4.3 Control variables.....	17
4.4 Survey.....	18
5 Next steps	19
6 Literature	20

1 Introduction

Early job insecurity is a much-discussed issue across European countries and how to overcome it by finding secure employment is the topic which NEGOTIATE aims to address. In Work Package 7 (WP7) we explore the negative consequences – so-called scarring effects – of employment instability and unemployment in Bulgaria, Greece, Norway and Switzerland. The aim of the study is to examine the role that employers play in the inclusion and exclusion of young adults who have experienced early job insecurity as an objective phenomenon in the labour market.¹ The impact of education, economic labour market conditions and employment policies on employer behaviour are of special interest. What kind of job biographies are recruiters looking for and what experiences are examined with caution? Several studies have explored the consequences of insecure job experiences of young people (Cockx/Picchio 2013; Ferro-Luzzi et al. 2011; Helbling/Sacchi 2014). While some have found that being unemployed right after graduating decreases the chances of a successful job application even several years later and also affects future wages negatively, others have found no significant effects. Similarly, there is no consent about the effect that a mismatch between an applicant’s education and employment has on further employment.

A considerable part of the dissension can be explained with the use of different theories and the application of different methods in different national contexts. In WP7 we apply a straightforward methodological design in order to study the scarring effects of insecure job experiences induced by employers: a multidimensional vignette experiment integrated in a web-based employer survey. The vignettes simulate hypothetical job candidates differing in their gender, education and experience of (un-)employment. So far, this methodology has only rarely been used in international comparative research in order to analyse employer behaviour in different national settings.

Chapter 2 of this working paper outlines the major theoretical concepts that have been used to explore and explain the possible scarring effects that result from employer behaviour: Human capital theory, signalling theory and statistical discrimination theory. By analysing the previous results of research on recruitment and the respective conceptual approaches we will build a comprehensive theoretical framework for our own study. While aiming to overcome the methodological shortcomings of previous studies, we will present the concept behind factorial survey experiments in chapter 3. Chapter 4 outlines the research plan of WP7, a multidimensional vignette experiment as part of a web-based employer survey in four European countries marked by different economies, labour market regulations and educational systems: Bulgaria, Greece, Norway and Switzerland. Chapter 5 presents the next steps of the ongoing research process.

¹ For a definition of job insecurity as an objective phenomenon compared to a subjective experience see NEGOTIATE Deliverable 3.1 „Indicators and data sources to measure patterns of labour market entry across countries”.

2 Theoretical considerations and state of research

One of the basic problems employers face during recruitment is the limited amount of accessible information on job applicants. Within a short space of time and with limited resources, recruiters try to find out as much as possible about the job candidates' productivity. During the first stage of the hiring process, employers often have to rely entirely upon limited information extracted from CVs. The questions regarding what sort of information they draw upon from the CVs in order to predict the suitability of the candidates for a specific position and how they interpret this information have brought about many studies in the social sciences. The mix of theoretical approaches has led to a great heterogeneity amongst the findings. In the following we want to address three theoretical concepts with the aim of understanding the impact of youth unemployment on a person's career prospects from an employer's perspective: Human capital theory, job market signalling theory and employer discrimination theory. Not least we need to consider the country-specific institutional and economic contexts – the macro level – which frame the recruitment behaviour of employers and may shape hiring processes depending on the economic and political conditions.

2.1 Human capital theory

Recruiters seek to know what the applicant's performance at work is like, which includes his or her skills and productivity – often referred to in literature as *human capital* (Becker 1964). The acquirement of human capital takes place during education and at work. Analogously, experiences of unemployment can be understood as foregone chances of human capital accumulation or a loss of previously earned skills and knowledge (Arulampalam et al. 2000). Frederiksen et al. (2013) have found that the duration of previous employments is an important indicator for human capital, simply because the longer the duration, the more time the worker had to accumulate skills. Besides the duration of employment, recruiters are also interested in the quality of prior work experience. The skills that are the most valuable for organisations are work-specific skills, which recruiters might expect from a candidate, if they have worked in the same or in a comparable occupational field before, and/or they have acquired the appropriate skills during education. Hence, depending on what the unemployed people are doing during unemployment, human capital theory would presume that an increase in the duration of unemployment leads to decreased individual productivity, since long spells of unemployment mean that an applicant had less time to acquire skills and knowledge. On top of that, it suggests that candidates who have been educated and/or have worked in occupational fields that are not related to the vacant job position, are less well equipped with work-specific human capital. Accordingly, both, experiences of unemployment and a mismatch of job and education can be interpreted as risks for productivity in the eyes of the employers, likely resulting in an unsuccessful job application, unemployment and individual scars.

While human capital theory offers some convincing arguments to understand the selection of job candidates by employers, it cannot sufficiently explain the salaries of newly hired employees who have suffered insecure employment at an earlier stage of their career. Based on a market model, human capital theory assumes that wages only depend on the workers' (predicted) productivity (Diem/Wolter 2014, Rosenbaum et al. 1990). This implies that employers would pay applicants with a history of unemployment a lower wage, if they really assume that they bring along lower human capital. However Cockx and Picchio (2013) have

found evidence that this assumption does not hold true. They argue, that although the duration of unemployment does indeed decrease the chance of re-entering the labour market, it does not significantly affect wages and the quality of work of the subsequent employment. Hence, the argument of human capital theory with regard to employers' assessment of early job insecurity is inconsistent. Other theoretical arguments are needed in order to explain why unemployment negatively affects an applicant's chances of being hired but does not do so in the case of wages more consistently. Signalling theory and discrimination theory provide alternative explanations as to why recruiters assess information regarding past experiences of job insecurity in job candidates' CVs negatively without making any further assumptions concerning their wages.

2.2 Signalling theory

Since acquiring information about the applicants' true capabilities is costly, recruiters often rely on the most visible, but sometimes superficial clues, which can usually be extracted from CVs. This information can be classified into two categories: the unalterable attributes, such as gender or ethnicity – what Spence (1973) calls *indices* – and *signals*, which in contrast can be actively formed by the individuals, such as education and employment experiences. Educational credentials, school grades, company names of previous employers, but also gaps in CVs can serve as signals. According to signalling theory, young workers are particularly at risk of entering a situation in which there is a mismatch between their education and their job. Since young people who have just entered the labour market have little or no employment experience, they provide fewer signals through which recruiters can interpret their productivity than older candidates with longer employment histories. Accordingly, Bellmann and Bender (2005) have observed a high probability of recruiters putting young applicants in less optimally matched positions. Previous experiences of mismatched employment can in turn be perceived as a negative signal during later job applications. Following this logic, it becomes difficult for a young person to escape the vicious circle of mismatched situations once they have taken an unsuitable mismatching job after graduation.

In line with human capital theory, signalling theory suggests that spells of unemployment can signal a worker's low productivity and a deterioration of their motivation, behaviour and skills (Atkinson et al 1996). Although employers do not systematically reject people with a history of unemployment, they are more careful about whether they hire them or not, in order to avoid the potential risk of an unprofitable company investment (Helbling/Sacchi 2014). In many cases they are more likely to choose the safer way by hiring people with a "safe" biography (if the candidate pool allows for this) or preferring not to hire anybody at all than to risk disrupting the workplace (Devin/Hogarth 2005).

Other authors are more optimistic about what unemployment may signal. Ma and Weiss studied people, who voluntarily prolong their unemployed status and reject taking on the next best job. This can be the case, if the offered wage is below the lowest wage that the applicant would accept – the so-called reservation wage – or if taking the job would decrease his/her chances of finding future employment (Ma/Weiss 1993). In light of this, it seems plausible, that employers do not necessarily always consider unemployment or even prolonged periods of unemployment as a bad signal; instead, they might differentiate between individual cases. According to McCormick (1990), former job experiences are stronger and more reliable signals for productivity than the duration of spells of unemployment.

Eriksson and Dan-Olof (2014) suggest that the strength of the negative signal of experiences of unemployment firmly depends on the duration of the spell and whether work experience follows the periods of the inactivity. In a field experiment they have found evidence that unemployment needs to last for at least nine months for recruiters to perceive it as a bad signal. Furthermore, they suggest that the effect of a spell of unemployment can be neutralised by subsequent work experiences. Further, the rank and quality of the position an employer is recruiting for also plays a major role. Employers that are recruiting for positions that require low or medium skills are more likely to reject applicants who have experienced unemployment, while the recruitment for positions that require higher skills is accompanied by more tolerance towards applicants with experiences of unemployment, even if they were long-term. Whether unemployment is perceived as a negative signal not least depends on the reason of the job displacement.

Even though signalling theory adds valuable additional explanations to human capital theory in terms of understanding scarring effects from an employer's perspective, both economic theories do not consider the social embeddedness of the hiring process. Sociological theories on the other hand take the social background of both job applicants and companies into account, against which signals must be analysed, and upon which their meanings may vary. In order to explain how recruiters gather and evaluate information on the applicants' social backgrounds, discrimination theories consider the embeddedness of signals in a social context (Imdorf 2010).

2.3 Discrimination theories

Theories of discrimination help us understand why employers can read identical signals differently by taking information on the applicants' social backgrounds into account. It is sometimes the case that two individuals with the same educational credentials or identical work experience are treated differently. This may happen if these two individuals belong to different social groups, which are believed to be equipped with unequal abilities. Depending on the social backgrounds of the applicants, their previous experiences might be interpreted differently. The *taste-based theory of discrimination* (Becker 1971) argues that employers who have a taste for discrimination would be willing to sacrifice profit for choosing a less productive worker over a more capable one, because the latter possesses traits unrelated to productivity the employer does not feel comfortable with. The *statistical theory of discrimination* (Phelps 1972), on the other, hand is based on the premise that employers are rational individuals, whose actions are driven by profit maximisation. The reason why they exert discrimination is because of their imperfect observations and beliefs about members of specific groups. If the employers assume the proportion of productive workers to be relatively small in certain groups, they might be unwilling to spend time and money to find out the true abilities of somebody, who belongs to one of these groups, and might prefer to let possible talents go undiscovered. To sum up: The prior belief about a certain group can determine a recruiter's subsequent belief about the productivity of a worker from that group (Mishra 2003).

Signals can become unclear ('noisy') when interfering with class or ethnic background (Seibert/Solga 2005). The presumption of group homogeneity procures advantages for some and disadvantages for others that are part of other groups. The membership of a strongly discriminated group makes finding a job more difficult, since attempting to overcome the stigma means that the person needs to make an extra effort in order to prove his or her true abilities. This can be referred to as a *signalling cost* (Mishra, 2003). Unlike human capital theory, which assumes that recruiters act rationally and only hire the applicants with the highest

known productivity, and unlike signalling theory, which ignores the social contexts that the employers and job seekers are embedded in, discrimination theories suggest that one pays attention to the perception of people in relation to their social and cultural backgrounds.

Discrimination takes shape in various forms. The most obvious and strongest reaction is to not give the applicant a job at all. Another way to determine discrimination is to measure situations in which there is a mismatch between an individual's job and education. Higher qualifications might be required from an applicant from a discriminated group in order to prove her/his skills, whereas a recruiter might accept another application that signals a lower qualification from an individual from a group that is not discriminated. Overqualification is often the case for immigrant workers, whose credentials are downgraded when they apply for jobs in a host country (Andersson Joonas et al. 2012).

An important social dimension of hiring that WP7 focuses on particularly, is the relevance of gender in hiring. Gender related discrimination in organisational recruitment has been researched since the 1980s (Ashton/Magier 1980; Riach/Rich 1987; Roberts et al. 1988; Weichselbaumer 2004; Imdorf 2013). This research has pointed to employers' reluctance to hire women because they assume, for instance, that young mothers with young children are more often absent from the workplace than young fathers, or that young female workers may become pregnant. For a long time, women were also believed to interrupt their careers and withdraw from the labour market more often than young men. Imdorf (2013) found that recruiters are reluctant to hire female apprentices in the male-dominated occupational fields of the automotive repair and bodywork industry in German-speaking Switzerland. The study shows how recruiters make use of the gender category in order to anticipate social dysfunctions at company level, especially when a woman enters a predominantly male work force. From previous studies (Riach/Rich 1987; Weichselbaumer 2004) we conclude that different signals, indices and their combinations may vary according to an applicant's gender and may be associated with scarring effects in different ways for young men and women.

To summarise, the impacts of attributes such as educational attainment, unemployment, situations where there is a mismatch between an individual's education and job and gender are well known in the research literature: Some authors have examined scarring effects by concentrating on the duration of unemployment in particular (McCormick 1990; Cockx/Picchio 2013; Atkinson et al 1996), while others have measured its impacts by contextualising unemployment more specifically with regard to the employment history (Frederiksen et al. 2013; Dan-Olof (2014). Others yet again have used education as a benchmark (Diem/Wolter 2014; Rosenbaum et al. 1990). These categories will serve as the main experimental variables in our study. We will further differentiate education, patterns of unemployment (e.g. with respect to its duration) and experiences of employment, by taking gender into consideration in order to build a fine-tuned instrument for the experimental design of our employer survey.

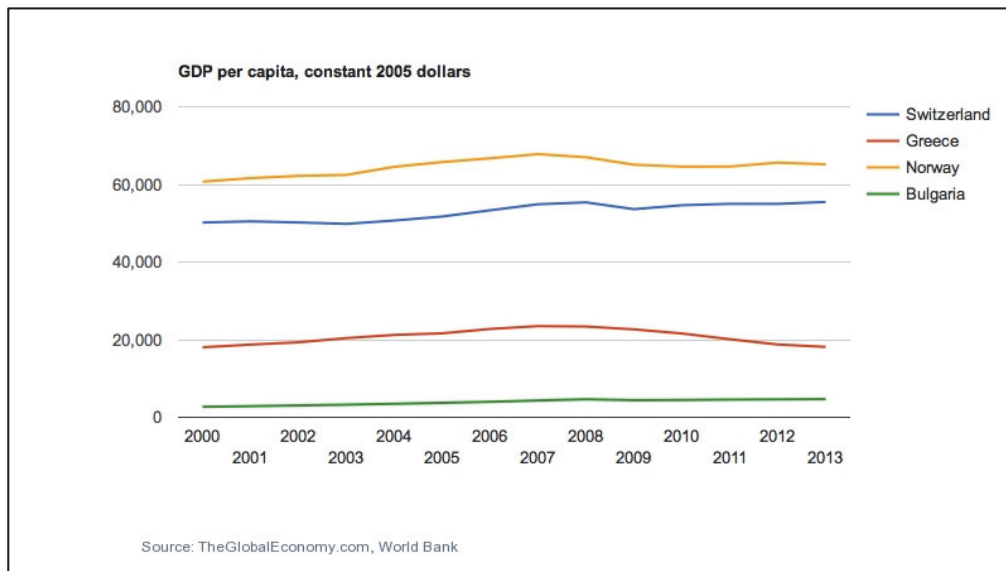
2.4 National contexts of recruitment: Economy, employment regulation and educational system

National labour markets are shaped by specific economic conditions and political regulations. We assume that different economic contexts and institutional frames are not only associated with insecurity regarding employment (Chung/van Oorschot 2011), but also with the country-specific recruitment behaviour of firms. The internationally comparative setting of our study

will allow us to pay attention to the differences of such contexts. We consider three contexts as especially relevant when employers make hiring decisions: (1) the economic context of the firm; (2) employment protection legislation; and (3) the structure of the educational and training system and how it is linked to the structure of the labour market. The latter is assumed to have an impact on the signalling value of educational credentials.

The *general economic situation* of a country, and especially the one within specific industries, is relevant for a company's risk assessment when hiring young employees. Gangl (2002) was not only able to show that the risk of unemployment closely follows the cyclical changes of economic conditions, but that the lowest qualified are affected the most heavily by such changes. Hence the risk assessment of companies during the recruitment process is more cautious when the economic situation is difficult. We can therefore assume that job candidates' experiences of unemployment or occupation in insecure jobs might be exacerbated during the hiring process in difficult economic contexts.

Figure 1: Gross domestic product per capita in BG, EL, NO and CH (2000-2013)

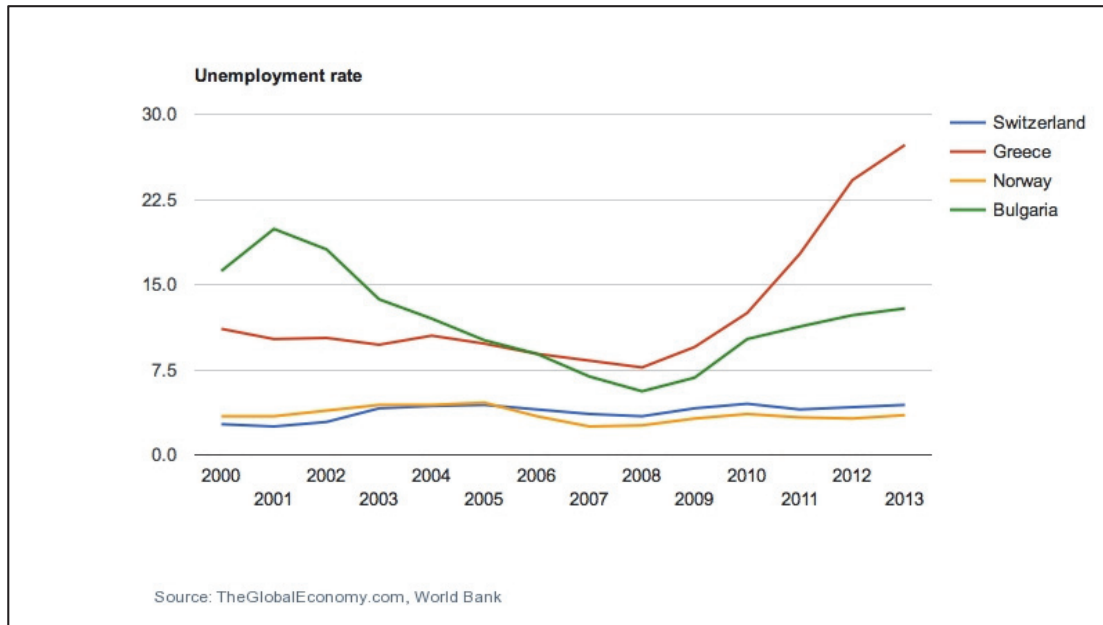


Note: GDP per capita, constant 2005 dollars: gross domestic product divided by midyear population. Data is in constant 2005 U.S. dollars. Source: <http://www.theglobaleconomy.com/compare-countries/>

The gross domestic product (GDP) per capita figure is an indicator of a country's economic performance. An alternative measure, which captures the firm's hiring and firing behaviour more directly, is the (youth) unemployment rate, e.g. the share of the labour force that is without work but available for and seeking employment. *Figure 1* and *Figure 2* illustrate how the economic situations of the four countries that are under consideration in WP7 have developed from 2000 to 2013. *Figure 1* shows remarkably higher GDPs per capita (in constant 2005 dollars) for Norway (NO) and Switzerland (CH) than Greece (EL) and Bulgaria (BG). *Figure 2* indicates that the two pairs of countries also differ in regard to their unemployment rates, with growing figures for Bulgaria and especially Greece since the 2008 financial crisis, whereas the rates in Norway and Switzerland are considerably lower and rather unaffected by the crisis. Accordingly, if we only take the national economic situations of the four countries into

consideration, we can expect young people who have experienced job insecurities to have better chances of being hired in Norway and Switzerland than in Bulgaria and Greece.

Figure 2: Unemployment rate in BG, EL, NO and CH (2000-2013)



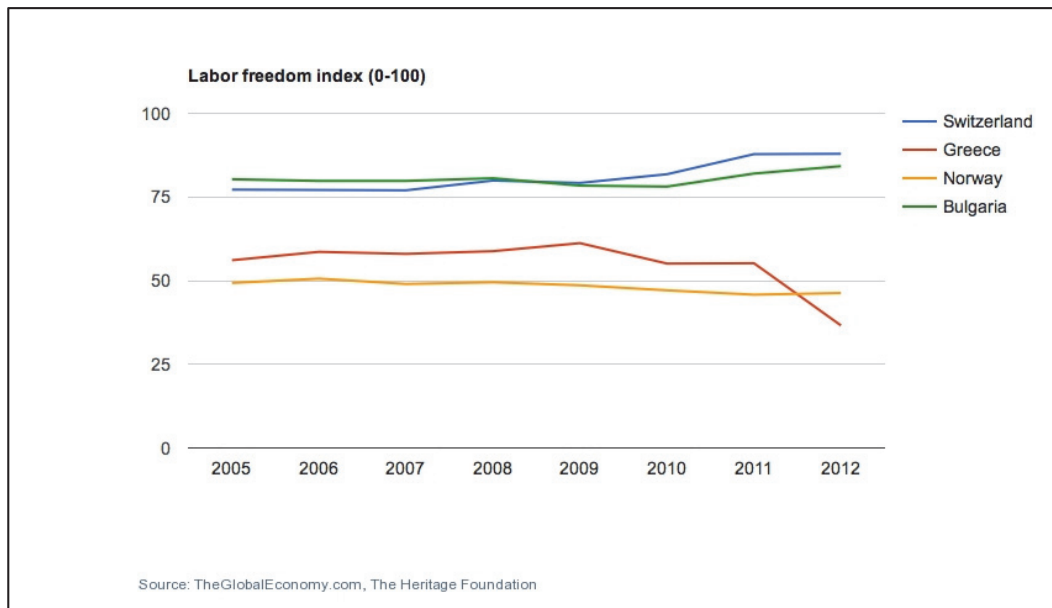
Unemployment rate: share of the labour force that is without work but available for and seeking employment. Source: <http://www.theglobaleconomy.com/compare-countries/>

When it comes to the institutional context of recruitment, a country's *employment protection legislation* seems particularly relevant with regard to a firm's recruitment behaviour. Helbling and Sacchi (2014) argue that low employment protection allows labour market outsiders, such as entrants and the unemployed, to re-enter the labour market more easily because dismissal costs are low and work contracts can be terminated easily in case employers are not satisfied with their newly hired employees. Hence, in countries where permanent contracts have strong employment protection and a strictly regulated minimum wage exists, employers might be more careful about their hiring decisions. In such a context, in the case of bad staffing, the costs that are related with the dismissal of an employee are accordingly high. Therefore employers might be more hesitant when it comes to hiring job candidates who have already experienced unemployment and might be considered less productive or reliable. In contrast, in countries with relatively low employment protection, employers have more freedom to give such job candidates a go, which may lead to better chances for younger and female candidates, because they can be easily replaced if necessary (Green 2006). Furthermore, depending on the various forms of employment protection in different countries, recruiters might show a preference for one sex over the other.

A measure for a country's employment protection regulation is the labour freedom index, a quantitative measure that takes various aspects of the legal and regulatory framework of a country's labour market (including regulations concerning minimum wages, laws inhibiting layoffs, severance requirements and regulatory restraints on hiring and working hours) into

consideration.² *Figure 3* shows that the four countries of our study exhibit different pairings than in the preceding graphs when it comes to this index. While Bulgaria and Switzerland show similarly high measures of labour freedom, pointing to very liberal labour market structures, Norway and Greece show tighter employment regulations. Hence, as far as employment protection is concerned, we can expect better chances of being hired for young adults who have experienced job insecurity in Bulgaria and Switzerland than in Greece and Norway.

Figure 3: Labor freedom index of BG, EL, NO and CH (2005-2013)



The labor freedom index is composed of six quantitative factors: ratio of minimum wage to the average value added per worker, hindrance to hiring additional workers, rigidity of hours, difficulty of firing redundant employees, legally mandated notice period, and mandatory severance pay. Source: <http://www.theglobaleconomy.com/compare-countries/>

In *Table 1*, the four countries of our study are listed according to their economic situation and their employment regulation. Each of the four countries is marked by a particular recruitment context. While Switzerland combines high economic performance with high labour freedom, Norway combines a similarly good economy with tighter employment regulations. Greece and Bulgaria in contrast are two countries with smaller economic performance, but employment protection is tighter in the case of Greece than in Bulgaria. Therefore, we expect the four countries' contexts to have a differing impact on the meaning and significance of individual job insecurity for an individual's chances of being recruited for a new job.

² See <http://www.heritage.org/index/labor-freedom> for more detailed information on the labour freedom index.

Table 1: Economic and employment protection indicators of BG, EL, NO and CH compared

		Economy (GDP / Unemployment rate)	
		<i>Higher performance</i>	<i>Lower performance</i>
Employment regulation (Labor freedom index)	<i>Less tight</i>	Switzerland	Bulgaria
	<i>Tighter</i>	Norway	Greece

Furthermore, depending on the country-specific *structures and regulations of the educational system*, educational credentials may provide more or less trustworthy information about the applicants’ abilities and skills in different economic and institutional contexts. When assessing the relevance of educational policies for hiring, one needs to take a country’s economic situation in the long run into consideration, as well as the possibility that the latter and the development of educational structures and offers might be interrelated. For example, due to the long-lasting economic wellbeing of the Swiss labour market, vocational education and training (VET) and especially dually organised VET (company- and school-based apprenticeships) is well developed in Switzerland (Dif-Pradalier/Zarka 2014). The vocational track is in effect the preferred career path for two out of three young people that have been educated in the Swiss system, its quality is considered to be high and vocational education enjoys widespread recognition (Müller/Schweri 2015). In addition, the standardisation of the Swiss VET sector is high and the link between vocational certificates and labour market segments is strong (Helbling/Sacchi 2014).

Depending on the institutionalisation of VET, a job candidate’s unemployment or experience of a mismatch between education and job may be interpreted differently by recruiters. In countries with highly developed vocational training schemes and strongly standardised transition systems, such as in Switzerland, unemployment after graduating from VET might appear to be more unusual – and therefore more stigmatised and less socially acceptable. This assumption results in conflicting hypotheses about how applicants’ job insecurity may have an impact on employers’ hiring practices in the case of Switzerland. While, with regard to its weak employment protection and the favourable Swiss economy, one would expect the negative effects of job insecurity on being hired for a new job to be limited, the strong link between education and employment may still have a scarring effect.

While Norway shares some similar characteristics with Switzerland – a successful economy, an occupational labour market with a growing importance of apprenticeships as an organisational form of VET provision (Høst 2008) – the same cannot be said for Bulgaria and Greece, two countries with much poorer economies and vocational educational systems that are less standardised. The consequence of the lower quality and recognition of VET in Bulgaria and Greece (especially compared to CH) is that higher education is more widespread and an important prerequisite for gaining access to good jobs (for Bulgaria see Boyadjieva/Ilieva-Trichkova 2015). Norway combines a well-developed VET sector with a relatively high share of higher education. Hence, the influence of a country’s long-term economic situation on recruitment practices may be partly mediated by different educational policies.

If vocational training, or education in general, is an unclear signal for productivity in countries where the institutionalised link between education and employment is relatively weak (BG, EL), we can assume that recruiters are more likely to draw upon additional information such as references or gender. Or in other words, their decisions should not solely rely on information on an applicant's training or education, since vocational certificates or school grades are not to be trusted (Di Stasio/Gërkhani 2015).

A similar mechanism can be assumed for the signal of unemployment experiences in a job candidate's CV. Gibbon and Katz (1991) found that the quality of the signal that unemployment gives off firmly depends on exogenous reasons such as the closure of workplaces. Employers will not infer negative values from a mass layoff, since the signal becomes noisier when facing a big group of displaced workers. Continuing this thought, one might argue that in a country with a high rate of unemployment, an individual's unemployment will be perceived as an unclear signal. As the general unemployment figures in *Figure 2* have already shown, Greece currently has an exorbitant youth unemployment rate of 52.4% – the highest rate in Europe together with Spain – while Norway and Switzerland's levels of youth unemployment are many times lower (7.8% and 8.6% respectively). Bulgaria's youth unemployment rate of 23.8% is high, but lies between those extremes (OECD 2014). Given these differences in youth unemployment, the negative value of experiences of unemployment as a signal is likely to vary across the four countries, being higher in Norway and Switzerland than in Greece and Bulgaria.

How the different national contexts finally have an impact on the chances of young adults who have had insecure job experiences being hired for new jobs, and which context ultimately proves to be the most relevant, remains an empirical question. In the second part of this working paper we outline our methodological and empirical approach, which is aimed at answering the research question of WP7: How do employers use information on education, experiences of insecure work, unemployment and gender in their assessment of written job applications in different economic and institutional contexts?

3 Methodological approach

The method applied in our study is that of a factorial survey experiment based on *vignettes*, a technique first developed by Rossi and Anderson (1982). “[...] [T]he key feature of a factorial survey is the implementation of a multidimensional experimental design within a survey. Respondents are asked to form judgments about vignettes – that is, descriptions of hypothetical situations, objects, or persons with various attributes (*dimensions*). The values (*levels*) of the dimensions are experimentally varied across the vignettes so that the impact of these levels on respondents' judgments can be estimated” (Auspurg/Hinz 2015 p. 1f).

While this method has been widely used in marketing research, it has only rarely been applied in labour market research. In our study, each vignette will illustrate a job seeker's CV. Hence the dimensions mentioned above refer to selected features of the job applicants, and the levels are the descriptions of those dimensions (e.g. *male* and *female* are the levels for the dimension *gender*). We will discuss the dimensions of the vignettes and their levels in more detail in section 4.2.

A main aim of our research design is to capture the complexity of hiring decisions and to test multiple potential scarring factors at the same time. Since the dimensions are orthogonal to each other, that is, the levels of one dimension can vary independently regardless of the levels of other dimensions, it is possible to calculate the influence of each of the dimensions on the outcome (Auspurg/Hinz 2015). A multifactorial survey design therefore enables the analysis of the single and joint effects of several features of the job applicants on hiring decisions.

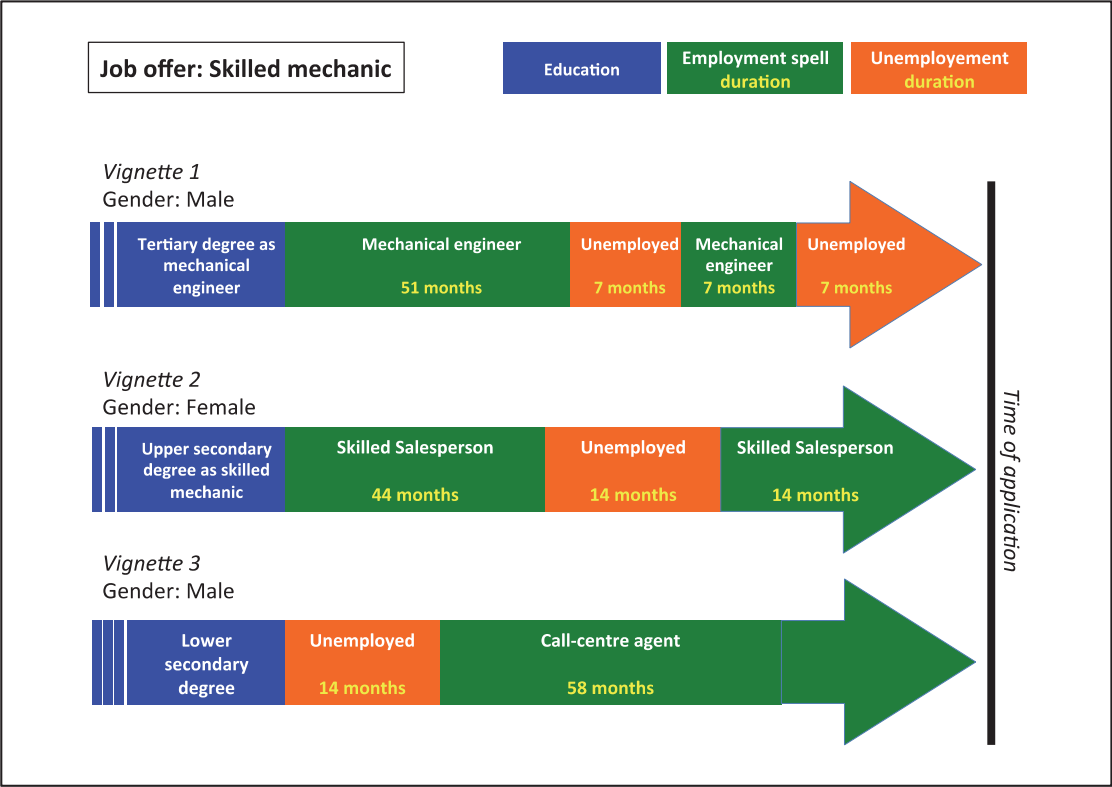
The total number of possible vignettes (CVs), called the *vignette universe*, depends on the number of dimensions and levels. A high number of dimensions can cover more aspects of the objects (in our study: applications) that are going to be tested, but it would also create a larger universe, which in turn would require a larger sample of respondents. A small number of dimensions and levels on the contrary do not need a huge sample, but respondents might get bored if they are asked to rate vignettes, which do not vary a great deal from one another (Auspurg/Hinz 2015). We have decided to work with seven variables (dimensions) with two to seven levels each, and our universe contains approximately 1,400 plausible vignettes (CVs). This is obviously a large number, which is impossible to be viewed by every single respondent. One way to alleviate this problem is to divide the vignettes into *decks*. If each deck encompasses 10 vignettes, 140 different decks are necessary to cover the 1,400 plausible vignettes. Thereby, each deck needs to be shown to a minimum number of 5 respondents, hence a minimal sample size of $N=700$ cases (140×5) will be necessary in order to implement this vignette study successfully. The more vignettes a deck contains, the less decks, and therefore the fewer respondents are required. But a large number of vignettes can exhaust respondents and affect the quality of their answers.³

Not to be underestimated is the visual format of the vignettes, which determines its validity. In our study we will apply a graphical illustration of the chosen dimensions. *Figure 4* shows three different vignette examples. Aiming to create a realistic situation for the recruiters, the final vignettes will resemble real CVs rather than arrows as shown in *Figure 4*.

A factorial survey design offers many advantages: High internal validity thanks to the experimental setting; high external validity that corresponds with the characteristics of a survey design with a large sample; and a reduced social desirability, which derives from applying multiple factors instead of single-item questions. Nevertheless, it is important to keep in mind that the respondents are aware of the hypothetical nature of the vignettes and that the influence of social desirability cannot be eliminated entirely.

³ Choosing the size of the deck therefore depends on the size of the respondent pool on the one hand and the size of the vignette universe on the other hand.

Figure 4: Graphical illustration of three exemplary vignettes



4 Empirical Research Plan of the employer survey

In order to answer our research question of how employers assess information on education, experiences of insecure work, unemployment and gender in their assessment of written job applications in specific economic and institutional contexts, we focus on employers as key actors behind scarring effects on the meso-level. In the following, we further explicate the design of a factorial survey experiment as an integral part of an online survey, which will allow us to analyse how recruiters make hiring decisions and how early job insecurities of job applicants have an impact on their decisions. For this purpose a large sample of job advertisements will be collected in all four countries. The real recruiters from the respective vacancies will be asked to participate in a web-based survey, which will include the experimental study. Vignettes of hypothetical candidates are integrated in the survey, and the recruiters will be asked to rate and select different candidates. Furthermore, we present detailed information on our sampling strategy, the experimental and control variables of the vignette study and the structure of the questionnaire in which the vignette study will be embedded.

4.1 Sampling

We have decided to sample real vacancies in order to maximise both the external and the internal validity of the study. The employers, who we will ask to participate in the survey, will have recently been recruiting for actual vacancies and will therefore be adequately prepared to participate in our study. This allows the results to be close to the outcomes of the real hiring

process. The real job vacancies will make it easier for the respondents to answer our questions, because they do not need to imagine a hypothetical situation of the hiring process nor the requirements for the positions to be filled. Further, we will only sample positions, which are advertised publically. One might argue that not considering all vacancies reduces the representativeness of the study. But since for many vacancies, which are not publicly advertised, companies often recruit “backhandedly” rather than formally, limiting the sample to advertised positions increases the internal validity of the study.

Furthermore, the choice of specific sectors constrains the validity of the study’s results. The chosen sectors should cover both low- and highly-skilled positions, they should contain gender-typed and gender-neutral occupations, and not least, they should be internationally comparable across the four countries that are involved in the study: Bulgaria, Greece, Norway and (German-speaking)⁴ Switzerland. In order to achieve international comparability we decided to break down some pre-selected sectors, which are relevant for all four countries, to the level of occupations or occupational fields as part of the sectors. On the one hand, the teams of the four countries of WP7 had to agree upon the smallest common denominators in terms of the occupations that are comparable across the countries regarding their quality, their job entry requirements and the number of vacancies. On the other, hand we aimed at sampling a large number of vacancies in order to achieve representative results for each sector. Consequently, when choosing the various sectors we may not only consider their significance for the respective countries, but they must also contain occupational fields, which are internationally comparable.

The five occupations/occupational fields that we have decided to examine (within each sector): nurses (health), mechanics (manufacturing), ICT specialists (information and communication), waiters and waitresses (hotel and restaurant industry) and financial service clerks (financial and insurance activities), should all meet the previously mentioned conditions. All these sectors play a significant role in the labour markets of the four countries and the respective occupational fields provide an adequate mix of occupations with regard to gender as well as with regard to different levels of required educational credentials and skills. The International Standard Classification of Occupations (ISCO) was used at the four-digit level to adjust the occupational fields across the countries.

The availability of vacancies in the chosen occupations has been assessed in all four countries to make sure there will be enough vacancies for the implementation of our study. In order to ensure that we have 700 to 1,200 valid cases across all sectors per country, and based on an estimated minimal overall response rate of 20%, each country will need to sample 3,500 to 6,000 vacancies. In the case of Switzerland, the Swiss Job Market Monitor at the University of Zurich will provide an appropriate sample of vacancies. In Bulgaria, Greece and Norway vacancies will be sampled directly from the job portals that are most relevant for the five selected sectors.

Nevertheless, at this stage it is difficult to foresee whether the findings will be statistically comparable in each sector, since we do not yet know how many vacancies each occupational field will finally provide. For example, let us assume the following case: While in Switzerland, Norway and possibly Bulgaria it might be possible to sample 700 to 1,200 job vacancies for nurses, this might be impossible in Greece as a consequence of the hiring freeze in the public

⁴ For linguistic and hence pragmatic reasons with regard to the data collection, the Swiss study will be restricted to the German-speaking part of the country.

sector. Hence, the Greek team would have to choose an alternative occupational field in the health sector, such as nurses or care workers that are hired by private employers or agencies. In this case the quality of the respective health occupations as well as the recruitment processes would not be directly comparable. However, due to the different economic and political conditions in the four countries, significant differences in vacancies might correspond with reality. If the sampling in any sector should actually show any kind of significant deviation, we will abstain from a statistical international comparison within the respective sector in favour of a multiple case study that is based on a comparable theoretical foundation. This would require the statistical analysis to be restricted to the national contexts.

4.2 Experimental variables (composing the vignettes/CVs)

As explained in the methodological section, one of the main advantages of a factorial survey experiment is the implementation of multiple dimensions. A major challenge of the experimental design is to construct the vignettes. With the intention of keeping the vignette universe within a reasonable range, we decided on having seven experimental variables, of which one is country-specific, which allows national specificities to be measured and analysed. Concluding from our literature review, education, employment experiences, spells of unemployment and gender matter in the eyes of recruiters when they assess the potential and risks of job candidates. The six international variables, which can be tested in various combinations, are *duration of unemployment*, *point of time of unemployment*, *level of education*, *type of education*, *employment experiences*, and *gender*. Each of these variables has two to seven levels, which are listed in the appendix.

Unemployment

The total time span during which the hypothetical applicants could accumulate experiences of employment and/or unemployment should be long enough to (1) allow for long periods of unemployment so that scarring effects can appear, and to (2) allow the following employment period to be long enough to test whether it can eliminate the negative signals of the previous spell(s) of unemployment. However, the duration must not exceed a certain period, because the target group of our experiment are young applicants. A total duration of 60 months or five years should meet these requirements. The maximum *duration of unemployment* will amount to 20 months, which can occur as a single spell or divided into two shorter spells of 10 months each. The length of spells of employment will amount to somewhere between 40 to 60 months. In the applicants' CVs, unemployment will either occur directly after the completion of formal education, recently, or at the point in time of the job application.

The combination of the respective variables *point of time of unemployment* and *duration of employment experience* allows for the following to be tested: First, whether the duration of unemployment makes any difference; second, whether applying while unemployed sends a different signal than applying while being employed; third, whether it matters that an applicant was unemployed directly after graduation (as is often suggested in literature); fourth, whether and how multiple experiences of unemployment matter; and fifth, under what circumstances subsequent employment can make up for the negative effects of prior unemployment. In addition to this, we can test the combinations of these signals. In total we include three levels

for duration of unemployment and seven levels for the point of time of unemployment (cf. appendix).

As for education experiences of employment, we differentiate between *level of education*, *type of education* and *employment experience*.

Education and work experiences

We have defined specific levels of these three dimensions for each sector (cf. appendix). The *levels of education* are *lower-secondary*, *upper-secondary* and *tertiary*. The first level (lower-secondary) accounts for applicants without post-compulsory education (e.g. dropouts from upper-secondary education). According to these levels different *types of education* were chosen within each sector for applicants with upper-secondary or tertiary degrees (e.g. *skilled mechanic* and *mechanical engineer*). Analogously *experiences of employment* were defined on three levels (including an unskilled level of work experience): *unskilled* (e.g. *unskilled mechanic*), *skilled* (e.g. *skilled mechanic*), and *highly qualified* (e.g. *mechanical engineer*). Vignettes showing combinations other than the ideal match (e.g. tertiary education in mechanical engineering and work experience as a skilled or unskilled mechanic) signal a vertical mismatch to the recruiter.

In order to test the effect of a horizontal mismatch on hiring decisions we distinguish between *sector relevant* and *sector irrelevant types of education* as well as *employment experience* (in each case, the relevance is given with regard to the occupation of the vacancy that the recruiter has to consider). To keep the attributes of *sector irrelevant* education and experiences of employment constant across all sectors, qualifications and occupations within the *sales sector* were chosen, as this sector is not strictly regulated regarding the career path that is required and allows for a lateral entry (e.g. imagine a job candidate with an upper-secondary degree as a mechanic who has worked as an unskilled salesperson for a while and is now applying for a vacant position as a skilled mechanic). Finally, we plan to integrate having worked as a *call centre agent* as an additional level of the job experience variable as this level signals that the applicant has had work experience in a precarious job. As the position *call centre agent* does not require specific skills or credentials it might signal a lack or deterioration of human capital in the eyes of the employer.

Gender

The variable *gender* allows for a comparison of scarring effects between male and female applicants. We aim to analyse to what extent and under what circumstances gender discrimination is an issue in hiring. Discrimination might be stronger in some sectors or countries than in others. Also, gender might strengthen or weaken the scarring effects of specific educational paths, or experiences of unemployment or employment.

Country-specific variable

Finally, each of the four countries' teams decided to add a country-specific experimental variable (dummy variable) in order to include an additional dimension in the vignettes, which is of national but not necessarily of international relevance. In the vignette study, we additionally test for the relevance of *abroad vs. domestic job experience* in Bulgaria, *Greek vs. Non-Greek nationality* of applicants in Greece, *exposure to activation measures during unemployment* in Norway, and *job hopping* as part of declared work experience in Switzerland.

In order to increase the validity of the experiment, we will exclude implausible vignettes (for example: a candidate with an upper-secondary degree as a skilled salesperson who has had work experience as a computer engineer), because respondents might be unwilling to proceed with the vignette experiment and with the survey if some hypothetical candidates show highly implausible features. Implausibility might vary from country to country, and we are aiming for our vignette universe to be internationally comparable and of a high plausibility in all four countries. We will therefore exclude vignettes, which are implausible in at least one country (except in the health sector). In contrast, unusual but not impossible career paths (for example: a candidate who has a tertiary degree in computer engineering but worked as an unskilled salesperson later on) will allow the impact of education-job mismatches or over-qualification on recruiters' hiring-decisions to be tested.

To sum up, the six internationally comparable variables together with the country-specific variable enable fine-tuned measurements of the signals *education*, *unemployment* and *employment experiences*. We can create vignettes with different types of horizontal and vertical education-job mismatches, job-job mismatches, and different experiences of unemployment with regard to the duration and point of time of unemployment. All these combinations will be applied to both female and male vignettes in order to analyse how gender becomes relevant in hiring and moderates the effect of certain signals.

4.3 Control variables

Since the start and duration of some educational and training programmes vary across the four countries, the average age of the applicants varies accordingly. This could pose a problem for the international comparison of educational effects on hiring, because we would not be able to clearly separate the country-specific age effect from the effect that the respective educational systems have. We tried to avoid this entanglement by deciding not to mention a candidate's specific age in the vignettes, nor to specify an age range in the vignette (the latter would undermine its external validity). Instead, we will inform the respondents before they assess the vignettes that all applicants are at an early stage of their career.

Further control variables result from the country-specific experimental variables. Once a feature (*work experience abroad* for BG; *nationality* for EL; *activation measures* for NO; *job hopping* for CH) is chosen as a country-specific experimental variable, its reference category must consistently be included in the other three countries' vignettes in order to ensure international comparability. This means that, depending on the country, a combination of three of the four control variables *domestic work experience*, *application from natives*, *no activation measures undertaken* and *no job-hopping experience* is necessary in each country.

4.4 Survey

The online survey consists of three parts. In the first part respondents will be asked questions about the advertised job (e.g. workload, form of contract) and about the characteristics and requirements of the advertised position (e.g. required educational credentials and work experience, functions as a supervisor) beyond the information that is given in the job offer.

Following the first section of the survey, which will be kept short, the respondents will be asked to rate 8 to 10 vignettes, which will be shown to them one by one. Their first task consists of rating the likelihood of the illustrated candidate on the vignette being hired for the advertised position. The best rated three vignettes will enter the next round, where they will be paired with one another. The respondent will then be asked to appoint the preferred candidate for each pair (*forced choice experiment*). The vignette that is twice preferred is the winner. After the forced choice experiment, the respondents will be asked to report what other information they would have liked to know about the candidates in addition to the limited dimensions of the vignettes.

The third part of the survey (that follows the vignette study) covers questions about the recruiting process and further questions on the characteristics of the advertised position. The respondent will be asked how (through what channels) vacancies are communicated, who is involved in the recruitment process, if the recruitment occurs externally by means of a professional personal recruitment company (if so then the respective company is also included in the survey), how difficult it is to find suitable candidates for the specific job that is being advertised, and how urgent it is that the vacancy is filled. The respective answers will provide additional information on the various contexts and help us understand the vignette ratings. To find out how the recruitment process reflects organisational features, the questionnaire also includes questions about the size of the organisation, whether it is located in the public or private sector and what the economic growth of the company is like. Finally, we collect personal data from the respondents (e.g. work experience, professional background, function, education, gender, age).

At this stage, a German version of the questionnaire and the vignette study is prepared and the programming of the online tool by a subcontracted Swiss polling firm is under way for the first pretest. The questionnaire is currently being reviewed by the consortium members, and some additional adjustments might be done following their feedback. Some items of the questionnaire may also serve as a reference for the development of the life-course interviews within WP 4 and WP 5.

5 Next steps

A first pretest of the online survey tool will be implemented in German-speaking Switzerland in October 2015 in order to evaluate the first version of the questionnaire, its single items and the experimental instruments (embedded in the vignette study). This preliminary pretest will provide a functioning survey tool, which will then be translated into Bulgarian, Greek and Norwegian. In January 2016 the adjusted version will be pretested in all four countries in order to finalise the final version of the web survey. The main data collection will start in early April 2016 and run for a maximum of 2 months. The sampling of the job vacancies will be carried out one month earlier, in March 2016.

The recruiters (those responsible for the sampled job vacancies) will be contacted through different channels (depending on the country) to invite them to participate in the online survey. As an incentive, the survey participants will be provided with a summary of the results of our study. The letter that we will send to the recruiters will ideally be supplemented by a motivational note from the professional association of the respective sector, which should provide an additional incentive for the recruiters to participate. The professional associations will be invited to participate in the National Stakeholder Committees (NSC) of the four respective countries.

If everything goes according to plan, the raw data will be available as from June 2016. The first data analysis will take place within the following months in order to provide preliminary results, which will be documented in the second deliverable of WP7 (D7.2).

6 Literature

- Andersson, P./Gupta, N.D./Wadensjö, E. (2012): Overeducation among immigrants in Sweden – incidence, wage effects and state-dependence. In: IZA Discussion Paper No. 6695.
- Arumlampalam, W./Booth, A.L./Taylor, M.P. (2000): Unemployment persistence. In: Oxford Economic Papers 52, p. 24-50.
- Auspurg, K./Hinz, T. (2015): Factorial Survey Experiments. Los Angeles: Sage.
- Ashton, D. N./Maguire, M. J. (1980): Young women in the labour market. Stability and change. In: Deem R. (Ed.): Schooling for women's work. London: Routledge/Kegan Paul, p. 112-125.
- Atkinson J./Giles, L./Meager, N. (1996): Employers, Recruitment and the Unemployed. In: ies, Report 325.
- Becker, G.S. (1964): Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education. Chicago: The University of Chicago Press.
- Becker, G.S. (1971): The Economics of Discrimination. Chicago: The University of Chicago Press.
- Bellmann, L./Bender, St. (1997): Die Analyse der Stabilität von Beschäftigungsverhältnissen bei Berufsanfängern. In: Mitteilungen aus der Arbeitsmarkt- und Berufsforschung 30, 681-687.
- Boyadjieva, P./Ilieva-Trichkova, P. (2015): Institutional Diversity and Graduate Employability: The Bulgarian Case. In: Pritchard, R./Klumpp, M./Teichler U. (Eds.): Diversity and Excellence in Higher Education. Can the Challenges be Reconciled? Rotterdam: Sense Publishers, p. 153-174.
- Chung, H./van Oorschot, W. (2011): Institutions vs. Market Forces: Explaining the employment insecurity of European individuals during (the beginning) of financial crisis. In: Journal of European Social Policy. 21(4), 287-301.
- Cockx, B./Picchio, M. (2013): Scarring Effects of Remaining Unemployed for Long-Term Unemployed School-Leavers. Journal of the Royal Statistical Society: Series A (Statistics in Society) 176 (4), 951–980.
- Devins, D./Hogarth, T. (2005): Employing the Unemployed. Some Case Study Evidence on the Role and Practice of Employers. In: Urban Studies 42 (2), 245-256.
- Dif-Pradelier, M./Zarka, S. (2014): Redonner ses chances à l'apprentissage. Une comparaison France, Suisse, Italie. Paris: CFTC.
- Diem, A./Wolter, S.C. (2014): Overeducation among Swiss graduates: determinants and consequences. In: Journal for Labour Market Research 47 (4), 313-328.

- Di Stasio, V./Gërkhani, K. (2015): Employers' social contacts and their hiring behavior in a factorial survey. In: *Social Science Research* 51, 93-107.
- Eriksson, S./Dan-Olof R. (2014): Do Employers Use Unemployment as a Sorting Criterion When Hiring? Evidence from a Field Experiment. In: *American Economic Review* 104 (3), 1014-1039.
- Ferro-Luzzi, G./Falter, J.-M./Weber, S./Garibian, V. (2011): Have Unskilled Youths Become More Vulnerable to Unemployment in Switzerland? In: *Swiss Journal of Social Work* 11, 27-46.
- Frederiksen, A./Ibsen, R./Rosholm, M./Westergaard-Nielsen, N. (2013): Labour Market Signalling and Unemployment Duration: An Empirical Analysis Using Employer-Employee Data. In: *Economics Letters* 118 (1), 84–86.
- Gangl, M. (2002): Changing Labour Markets and Early Career Outcomes: Labour Market Entry in Europe Over the Past Decade. In: *Work, Employment/Society* 16, 67.
- Gibbon, R./Katz, L.F. (1991): Layoffs and Lemons. In: *Journal of Labor Economics* 9 (4), 351-380.
- Green, F. (2006): *Demanding Work: The Paradox of Job Quality in the Affluent Economy*. Princeton: Princeton University Press.
- Helbling, L.A./ Sacchi, S. (2014): Scarring effects of early unemployment among young workers with vocational credentials in Switzerland. In: *Empirical Research in Vocational Education and Training* 6:12.
- Høst, H. (2008): *Continuity and Change in Norwegian Vocational Education and Training (VET)*. Oslo: NIFU STEP.
- Imdorf, C. (2010): Die Diskriminierung ‚ausländischer‘ Jugendlicher bei der Lehrlingsauswahl. In: Hormel, U./Scherr, A. (Eds.), *Diskriminierung. Grundlagen und Forschungsergebnisse*. Wiesbaden: VS-Verlag für Sozialwissenschaften, p. 197-219.
- Imdorf, C. (2013): Lorsque les entreprises formatrices sélectionnent en fonction du genre. Le recrutement des apprenti(e)s dans le secteur de la réparation automobile en Suisse. In: *Revue française de pédagogie*, no 183, 59-70.
- Ma, C.A./Weiss A.M. (1993): A signaling theory of unemployment. *European Economic Review* 37 (1), 135–157.
- McCormick, B. (1990): A Theory of Signalling During Job Search, Employment Efficiency, and “Stigmatised” Jobs,” *Review of Economic Studies*, 57 (2), 299–313. □
- Mishra, A. (2003): *A Theory of discrimination based on Signalling and Strategic Information Acquisition*. Dundee.
- Müller, B./Schwerti, J. (2015): How specific is apprenticeship training? Evidence from inter-firm and occupational mobility after graduation. In: *Oxford Economic Papers*, 1-21.
- OECD (2014): Unemployment. In: <https://data.oecd.org/unemp/youth-unemployment-rate.htm>. (03.08.2015).

- Phelps, E.S. (1972): The Statistical Theory of Racism and Sexism. In: American Economic Review 62, 659-661.
- Riach, P.A./Rich, J. (1987): Testing for Sexual Discrimination in the Labour Market. In: Australian Economic Papers 26, 165 – 178.
- Roberts, K./Richardson, D./Dench, S. (1988): Sex discrimination in youth labour markets and employers' interests. In: Walby, S. (Ed.), Gender segregation at work. Milton Keynes: Open University Press, p. 100-113.
- Rosenbaum J.E./Takehiko, K./Settersten, R./Maier, T. (1990): Market and Network Theories of the Transition from High School to Work: Their Application to Industrialized Societies. In: Annual Review of Sociology 16, 263-299.
- Rossi, P.H./Anderson, A.B. (1982): The factorial survey approach: An Introduction. In: Rossi, P.H./Nock S.L. (eds.): Measuring social judgments: The factorial survey approach. Beverly Hills: Sage, p. 15-67.
- Seibert, H./Solga, H. (2005): Gleiche Chancen dank einer abgeschlossenen Ausbildung? Zum Signalwert von Ausbildungsabschlüssen bei ausländischen und deutschen jungen Erwachsenen. In: Zeitschrift für Soziologie 5 (34), 364–382.
- Walther, A. (2006): Regimes of youth transitions: Choice, flexibility and security in young people's experiences across different European contexts. In: Young 14, 119-138.
- Weichselbaumer, D. (2004): Is it sex or personality? The impact of sex stereotypes on discrimination in applicant selection. In: Eastern Economic Journal 30 (2), 159-186.

7 Appendix

Experimental variables and attributes (vignette study)

1. Gender (2)

- Male
- Female

2. Duration of Unemployment (3)

- Short (10 months)
- Long (20 months)
- None (0 months)

3. Point of time of unemployment (7)

- Directly after graduation
- After first employment experience with subsequent employment
- After first employment experience with subsequent employment *and* after second employment experience
- After first employment experience without subsequent employment
- Directly after graduation *and* after first employment experience with subsequent employment
- Directly after graduation *and* after first employment experience without subsequent employment
- None

4. Employment experience (7)

- Relevant to the sector of the open job position

Mechanic sector

- Unskilled mechanic
- Skilled mechanic
- Mechanical engineer

Health sector

- Unskilled nurse
- Skilled nurse
- Head nurse

IT sector

- Computer assistant
- Skilled IT specialist
- Computer engineer

Finance and insurance sector

- Unskilled clerk
- Financial service clerk
- Financial service manager

Gastronomy/Tourism sector

- Unskilled waiter/waitress
- Skilled waiter/waitress
- Chef de service

- Off-sector employment experience
 - Unskilled salesperson
 - Skilled salesperson
 - Sales manager
 - Call centre agent

5. Type of education (2)

- Sector-specific
- Not Sector-specific

6. Level of education (3)

- Lower secondary
- Upper secondary
- Tertiary

7. Country Specific Experimental Variable (one per country)

- Bulgaria: Abroad job experience
 - Abroad job experience
 - Domestic job experience
- Greece: Nationality
 - Greek
 - Non-Greek
- Norway: Exposure to activation measures during unemployment
 - Activation measures:
 - No activation measures
- Switzerland: Job hopping during work experience
 - Job hopping
 - No Job hopping

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