Deregulation Job Security and Employability during the Great Recession. A multilevel analysis.

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The recent economic and financial crisis has been the most severe economic downturn that the European Union (EU) has faced since its creation. The crisis affected all EU economies, although to different degrees: whereas the Mediterranean and Eastern European countries have been heavily impacted, Continental and Nordic countries succeeded to avoid significant drops in GDP. Importantly, the crisis has been correlated with a wave of labour market reforms that introduced significant changes in the rights that employees have both individually and collectively. Most of these reforms have decreased protection for workers by making employment contracts less secure, expanding the coverage of temporary and agency work, as well as by reducing the power that trade unions used to enjoy. All in all, these labour market reforms amounted to a massive turn towards deregulation as many national governments opted for austerity measures as a way out of the crisis. What have been the implications of the crisis induced labour market reforms for the quality and security of jobs in Europe? Has deregulation affected workers' perceptions of job security and employability? And was the crisis experienced similarly across Europe? This chapter seeks to answer these questions by analysing the effects of the economic crisis and labour market deregulation on job security and employability in the EU. To do so, the chapter uses two waves of the European Social Survey data (ESS2, 2002 and ESS5, 2010) to test whether perceptions of job security and employability changed in response to deregulatory labour market reforms. Using a multilevel estimation strategy, the chapter finds that the crisis induced labour market reforms have not impacted negatively workers' perceptions of job security. Instead, unemployment levels and the generosity of active labour market programs (ALMPs) are the only significant predictors of self-perceptions about job security. Furthermore, we find that self-perceived employability is negatively affected by unemployment rates and positively correlated with GDP growth.

Introduction

The economic crisis that began in 2008 has created important labour market imbalances in many European Union (EU) member states. The steady decline in average unemployment levels witnessed across the EU by 2008 was suddenly cancelled, with average unemployment levels reaching 10.9 percent in the first quarter of 2013. This figure hid a large variation between EU member states: whereas Greece and Spain have reached unprecedented levels of unemployment

in 2013 of 27.5 percent and 26.1 percent respectively, in Germany the unemployment level stood at 5.2 percent in the same year. Even more, unemployment levels among disadvantaged labour market groups such as young workers have been much higher, in some cases being double or more than double the unemployment rate for all age groups.

In order to respond to the unemployment malaise, both the European Commission as well as national member states have searched for labour market policies that could assist the unemployed and mitigate the impact that the crisis had on national labour markets. At the supranational level, the Commission has advocated for a *flexicurity* approach to address unemployment, arguing that "flexicurity policies are the best instrument to modernise labour markets: they must be revisited and adapted to the post-crisis context, in order to accelerate the pace of reform, reduce labour market segmentation, support gender equality and make transitions pay" (European Commission 2010, 2). In view of this recommendation, the majority of the EU member states have implemented extensive labour market reforms that sought to adjust their labour markets to the post-crisis economic realities. However, while these measures aimed at deregulating national labour markets by promoting the use of temporary and part-time contracts, introducing more flexible regulations for hiring and firing as well as giving employers the upper hand in setting working conditions, they generally did not follow up with improving security for workers. As a result, the economic crisis has triggered wave of labour market reforms that have decreased the job security that employees used to enjoy prior to 2008.

This chapter examines the crisis driven developments and seeks to explain what were the effects of crisis driven surge in unemployment and subsequent labour market reforms on job security and employability. It starts by describing the post-crisis labour market reforms that have been implemented in most of the EU member states. It shows that deregulatory labour market reforms have been the norm in fighting unemployment around Europe but that the effects of these reforms are hardly visible. Rather than reducing unemployment across the EU, these reforms have generally led to more precarious labour market conditions evidenced by increases in the number of temporary and part-time workers. In a second step, the chapter analyses the impact of unemployment and labour market reforms on workers' perceptions about job security and employability. Using data from two waves of the European Social Survey (ESS) that contain information on workers' wellbeing before and after the crisis (2004 and 2010), it shows that self-perceptions about job security are primarily influenced by unemployment levels. Employment protection legislation (EPL) for temporary contracts also seems to impact self-perceptions about job security but the estimated effect is less robust. Furthermore, the chapter shows that, at the

individual level workers in a temporary contract as well as young workers and foreigners perceive their job as being less secure. In comparison, public sector employment as well as union membership have a positive impact on job security. By comparison, we find that self-perceptions about employability are negatively influenced only by GDP levels: the higher the economic growth the more likely that people will feel more secure about their prospects of finding another job.

1. Institutional changes and labour market trends after the crisis

The structural unemployment crisis that affected Europe during the 1980s reinforced the belief that labour markets in the old continent are too 'rigid' and thus incapable of generating sufficient jobs (Blanchard 2006). This belief, implied that in order to solve the unemployment problem, labour markets had to be reformed, primarily by decreasing employment protection regulation for workers on permanent contracts and ensuring numerical flexibility by promoting atypical forms of work. In practice, the consensus around the need to adjust labour markets led to different policy solutions across Europe, depending on the institutional architecture of each country. In Mediterranean countries, reforms targeted primarily young workers while preserving the system of protections that the core labour force used to enjoy. This solution generated a dualist employment regime in which employment rights created substantial labour market segmentation between younger and older worker cohorts (Cutuli and Guetto 2013). By comparison, Scandinavian countries opted for deregulation but also for compensating workers through generous safety nets and reintegrating them rapidly into the labour markets by investing in active labour market policies (ALMPs). This compromise generated inclusive employment regimes in which all workers enjoyed similar levels of protection while national labour markets remained flexible enough in order to adjust to fluctuations in supply and demand. Denmark became the poster child of this *flexicurity* approach which was later embraced and heavily promoted by the EU. Finally, the United Kingdom and Ireland chose to let market forces determine employment outcomes by opting for emphasizing minimal employment protection and linking employee benefits to their marginal productivity, thus giving rise to a market driven employment regime (Gallie 2013).

Viewed from this employment regime perspective, the recent economic crisis has continued the cycle of deregulation that began during the 1970s employment crisis. Not only that the crisis has accelerated the deregulatory trends that were already in place many EU countries but it has also

enforced even more the old views according to which labour markets are still too rigid to respond to swings in unemployment levels. Against this background, it is not surprising that the policy solutions that were used by governments in order to respond to the crisis have primarily focused on scaling back protection in the hope that, in the medium term, unemployment will decline. However, compared with the 1980s, the recent crisis has triggered much swifter labour market reforms that were passed by governments during very short time spans and that were oftentimes accompanied by changes in collective bargaining systems. These reforms have especially affected Mediterranean and Eastern European countries, where the crisis has hit the hardest but also where the majority of workers were already affected by low levels of employment protection.

As Figure 1 shows, there is a significant heterogeneity between countries' reactions to the crisis in terms of the size and direction of employment protection legislation (EPL) reforms. In general, Nordic and Continental countries have preserved their pre-crisis levels of protection both for regular and temporary contracts. Most of the EPL reforms introduced in these countries concerned the use of agency work. In this respect, Denmark, Finland and Sweden have moved towards implementing the EU temporary agency work directive (2008/104/EC) which aims to set some minimum standards for workers on these types of contracts. Part of EU's flexicurity approach, the directive secures only minimal rights for agency workers, and does not change their precarious status. In fact, it allows derogations to many important aspects of employment such as the equal treatment principle which effectively maintain the precarious status of agency workers (Countouris and Horton 2009).

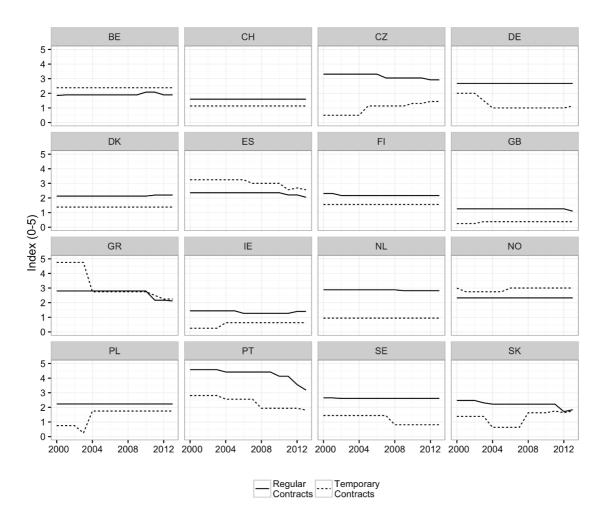


FIGURE 1. OECD Employment protection legislation index for regular and temporary contracts, 2000-2013.

In contrast with the Nordic countries, Mediterranean and East European countries have undertaken much more extensive reforms in their EPL systems that targeted both regular and temporary contracts. While these reforms have been driven by the severity of the economic crisis in the two regions, they were also vastly supported by the International Financial Institutions that provided economic assistance to countries under stress. Greece, Spain and Portugal stand out as the most active EPL reformers. In Greece, labour market deregulation went hand in hand with minimum wage and collective bargaining reforms (ILO 2014). Reforms targeting the labour market included increasing the trial period for open ended contracts, reducing the notice periods for firing workers but also increasing the duration of fixed term contracts from two to three years. Similarly, in Spain, the 2012 labour market reform reduced compensation for unfair dismissals, created a new type of employment contract for small firms which allowed them to extend trial periods for up to one year and also broadened the sectors in which temporary agencies are allowed to operate (OECD 2013; Horwitz and Myant 2015).

Eastern European countries undertook similar reforms in the EPL systems. However, unlike in the case of Mediterranean or Nordic countries, in Eastern Europe, regional heterogeneity was much higher as these countries do not easily fit in one specific employment regime. Rather, the region is characterized by different types of dependent capitalisms that combined market and state forces to different degrees, which gave rise to neoliberal, embedded neoliberal and neocorporatist varieties of capitalism (Bohle and Greskovits 2007; 2012). Each of these capitalisms is characterized by different levels of EPL regulation. Whereas in the embedded neoliberal regimes that characterize Hungary, Slovakia and the Czech Republic, EPL regulation ranked from average levels to fairly strong (see Figure 1) in the Baltic and South East European countries, labour markets underwent a prolonged period of deregulation even before the start of the economic crisis. Moreover, as Figure 1 shows, EPL for temporary contracts has generally increased towards mid 2000s as a result of reforms that adapted labour markets in these countries to EU standards. Similar with reforms passed in the Mediterranean region, the crisis has further contributed to the trend of implementing reforms to improve EPL regulation for atypical contracts while deregulating EPL for permanent contracts. For example, in Hungary the definition of temporary agency work was clarified while in Poland a large deregulation programme for around 250 professions was implemented which changed rules regarding entry criteria and apprenticeship periods.

In the case of market driven employment regimes, many of the labour market measures passed after 2008 were part of austerity packages and sought to provide even more flexibility in the short term. In the United Kingdom, businesses with fewer than 10 employees were exempted from virtually all new domestic legislation for a period of three years. At the same time, in the United Kingdom, EPL reforms targeted regulation for permanent contracts by it making harder for employees to claim unfair dismissal and introducing a cap on the redundancy payments for civil servants.

The effect of EPL deregulation on national labour markets has been substantial. OECD (2015) noted that almost half of employment growth since 1990s up to the crisis has been in non-standard forms of work while if the crisis is included the number rises to almost 60 percent. Moreover, being in a non-standard contract does not increase the chances to transition into a standard job while non-standard workers are worse off in terms of job quality: generally non-standard workers receive less training, have lower levels of job security, and tend to earn less. At the same time, temporary workers face higher wage penalties, experience slower wage growth and wage instability in comparison with permanent workers (OECD 2015, 139). As Figure 2 shows, the share of temporary and part-time work in selected EU economies varies substantially between

levels below 20 percent in the Czech Republic to above 50 percent in the Netherlands. The Figure also shows that in general the economic crisis has led to an increase in the share of temporary and part time work in total employment, although the net effect of the crisis varies considerably between countries.

Interestingly, there is a large variation within employment regime clusters. As Figure 2 shows, whereas in Greece the number of non-standard contracts remained fairly low in spite of a deep financial crisis, in Spain non-standard forms of work are much more common and began to rise during the crisis after an initial drop between 2003 and 2007. By comparison, in the United Kingdom, the share of non – standard employment in total employment remained fairly stable before and after the crisis. However, the economic downturn has led to a shift in the types of non-standard contracts that employers offer. In particular, in the United Kingdom a distinct employment pattern has grown substantially – the *zero-hour* contracts. Compared with other forms of atypical work, zero hour contracts allow employers to have employees "on call" depending on availability of work. These types of contract offer almost no protection to workers as income is unpredictable while at the same time workers have to sign exclusivity clauses which tie them to one employer even for periods when no work is available. As Hadjivassiliou et al. (2015) note, around half a million workers in the United Kingdom were employed on zero-hour contracts in 2012 - 2013 and 37 percent of these workers aged between 16 and 24 years old.

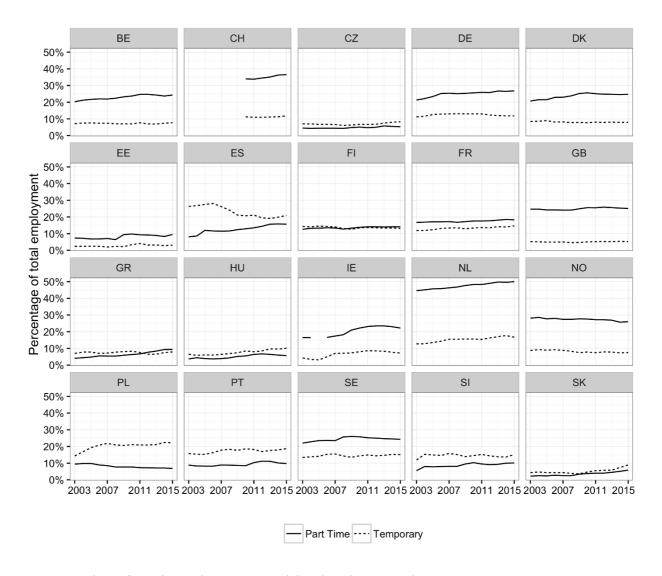


FIGURE 2. Share of part time and temporary work in selected EU countries, 2003 -2015.

Besides the detrimental effect on labour markets, the developments described above are also likely to impact individual perceptions about job security as well employability. However, as the literature notes, the effect of deregulation on individual perceptions about job security is mediated by how inclusive employment regimes are in each country (Paugam and Zhou 2007). In the following sections we carry out an empirical analysis that that takes into account both the institutional framework that characterizes each economy as well as the state of the economy in an attempt to check whether EPL levels impact worker' perceptions about job security and employability.

2. Determinants of Job Security

2.1. Data and Variables

For our empirical analyses we use both individual-level micro data and country-level macro data. For the individual observations we rely on survey data from the European Social Survey (henceforth ESS) collected in 2004 (wave 2) and 2010 (wave 5), that is, four years before and two years after the financial meltdown of 2008. The ESS project collects survey data on high quality national representative samples in different European countries every two years. Next to a core questionnaire that is asked in all waves, each ESS round includes different rotating modules focusing on specific topics. For this study we use waves 2 and 5 because they contain the "Family, work and well-being" module, which includes perceptions of job security together with other variables that are useful for our investigation. One of the characteristics of ESS data is that the number of countries surveyed is different from wave to wave. To maintain our sample consistent over the two time points, we select only the countries that are surveyed at both waves. Hence our initial sample consists of 20 countries: Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, and UK. However, due to lack of observations for some crucial variables in 2004, we need to drop four countries from this sample: Estonia, France, Hungary, and Slovenia. This leaves us with 16 countries, consistently observed in 2004 and 2010. From the greater group of respondents who took the ESS survey in the selected countries and waves, we keep only those individuals who provide a valid response to all our individual-level predictors. Hence, our final individual-level sample consists of 24,007 individuals.

Our first dependent variable, *perception of job security*, is measured on a 4-point Likert-type scale where respondents are asked to assess how true the statement "My job is secure" is for them. The response options range from "Not at all true" to "Very true", with smaller values indicating low perceived security and greater values indicating high perceived security. Our second dependent variable, *perceptions about employability*, is measured on a 10-point Likert-type scale where respondents are asked how difficult would be to get a similar job if they had to leave the employer.

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¹ See http://www.europeansocialsurvey.org/data/module-index.html for more information on ESS data and its modules.

² In Hungary and France, we miss individual-level data from ESS, specifically the variable on the industry sector of the company where the respondents work is missing in Hungary, and the variable on the type of employment contract that the respondents have is missing in France. In Estonia and Slovenia, we miss country-level data from OECD about employment protection legislation.

The responses range from "Extremely difficult" to "Extremely easy", with smaller values indicating low levels of employability and higher values indicating high levels of employability.

A preliminary look at how the job security variable is distributed in our sample is provided by Figure 3. The figure shows the shares of respondents choosing each of the four categories in the 16 countries of our sample in 2004 and 2010. The countries are ordered from lowest to highest average perceived security.³ In the top row of the figure are the countries in our group where citizens feel less secure about their job: Slovakia, Czech Republic, Greece and Portugal. The case of Slovakia and the Czech Republic is puzzling. Although the two countries have average levels of employment protection and relatively low shares of atypical work in total employment they score the highest in terms of perceptions about job security. This might be related with the lack of welfare alternatives once a worker becomes unemployed (Paugam and Zhou 2007; Chung and van Oorschot 2012). As the literature has shown, the generosity of unemployment benefits can be linked with workers' perceptions about job security (Sjöberg 2010). The case of Greece and Portugal, on the other hand, carries the clear mark of the financial crisis: in both countries there has been a substantial increase between 2004 and 2010 in the tendency to respond "Not at all true" or "A little true" to the statement about job security. To give a concrete comparison, in 2004 Greek employees felt on average slightly more secure than German employees (country means of 2.61 and 2.57 respectively), while in 2010 the situation was inverted, with a far greater gap dividing the two groups (2.13 in Greece versus 2.93 in Germany). The only other country in our sample to experience a similar drop in perceived security as Greece and Portugal is Ireland, where the share of respondents choosing "Quite true" or "Very true" to the statement went to almost 80% to less than 55%, i.e. about one quarter less. However, in most of the countries the situation remained stable, with a few cases where perceptions of job security visibly increased, like Germany, Norway, and to a smaller extent Poland and Sweden.

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³ To overcome the imbalance in number of observations between the 2004 and 2010 samples, we first calculated the country averages for every year, and then calculated the average between the two years.

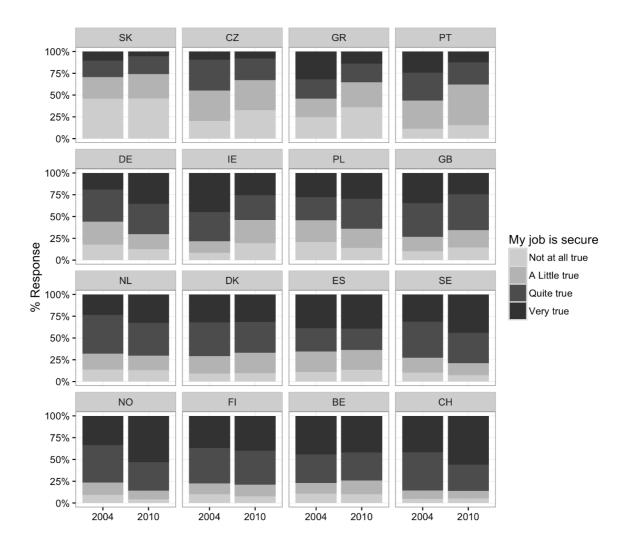


FIGURE 3. Share of respondents choosing each of the four categories.

But what affects perceptions of job security and employability in the countries surveyed here? To answer this question, we look at several characteristics of the individual respondents and the countries where they live. At the individual level, we focus on sociodemographic characteristics such as age (in years), gender (a dummy variable indicating whether the respondent is female), the level of education (recoded in three categories: low, middle, and high education), and a dummy variable indicating whether the respondents are citizen of the country where they live. From previous research (Erlinghagen 2008), we expect education to have a positive effect on perceptions of both job security and employability. On the contrary, we expect both age and the fact of being a foreign citizen to have a negative effect on our response variables. Erlinghagen (2008) shows that younger individuals are less affected by job insecurity than older individuals, and as for foreigners, we expect their working conditions to be generally more precarious, covered by limited contracts or by no work contract at all. We do not have any reason to expect gender to have either a positive or a negative effect on job security, but we include the variable to control for different sample composition across countries. On the other hand, following previous literature (Berntson,

Sverke, and Marklund 2006), we expect gender to have a negative effect on employability, with women being less likely to positively perceive their labour market status.

Another key group of individual predictors refers to the working conditions of the respondents. One important factor affecting perceived job security and employability is the type of work contract that people have. To take this into account we include two dummy variables, one indicating whether respondents have a limited, fixed-term contract, and one indicating whether they have no job contract at all. The type of industry by which respondents are employed may affect their feelings of job security and employability as well. To observe this effect, we include a series of dummy variables indicating the sector in which the firm the respondents work for operates. Following previous literature, we expect that workers in the public sector to feel the most secure about their jobs, followed by workers in industry and then services (Clark and Postel-Vinay 2009). From previous research, we also expect the size of firm for which respondents work to affect their perception of security: workers of bigger company tend in general to perceive their job as more secure than workers of smaller companies. To control for this, we include a variable recording how many employees work for the company where the respondents have their job. The indicator is coded in ordered categories, ranging from less than 10 to more than 500 employees. Finally, a crucial factor affecting job security is whether the respondent is member of a worker union. We observe this using a dummy variable. Overall, based on previous literature, we expect that trade union membership will have a positive effect on workers' perceptions about job security (Bender and Sloane 1999; Schnabel 2002).

The country-level data that we include come from multiple sources. We take data about gross domestic product (GDP) and unemployment rates from official national statistics. These two indictors capture two important aspects of the economic crisis that are supposed to be directly relevant for job security. GDP is a common indicator of countries' economic performance. A higher value usually indicates a growing economy, and it implies more investments and returns. A lower value, on the other hand, is an indicator of relative economic decline, and it may come together with companies cutting their workforce or going bankrupt. Hence, in contexts where GDP is higher, the average employee should have in general a safer job than in contexts where it is low.

An even more direct indicator of how much at risk a person's job is in a given context is unemployment rate. First, it indicates that in a country at a certain point in time there are more individuals who do not have a job and arguably want one. Hence, workers should feel their position to be less secure due to higher competition. Second, unemployment is usually an important issue that receives considerable media attention. Individuals are therefore supposed to be informed about

high levels of unemployment in their country, and that should affect their perceptions that jobs are, in general, less safe as more scarce. Previous studies have shown that, indeed, in countries with higher unemployment rates workers tend, on average, to feel less secure about their job (Erlinghagen 2008). Hence, we expect a negative effect of unemployment rate on perception of job security.

We also look at the types of policies that national governments implement to protect or stimulate the labour market. An important contextual factor that may affect perceptions of job security is the employment protection legislation (EPL) operating in a given country. EPL represents the most important set of rules and instructions that regulates the hiring and firing of workers under different types of contracts. As a result, low levels of EPL means that employers can hire and fire workers easily, without many institutional barriers, while high levels of EPL indicate that employment is more secure. Furthermore, changes in EPL, have been amongst the most important labour market adjustments passed by governments that sought to address the rise unemployment levels created by the crisis(World Bank 2013; Adascalitei and Pignatti 2015). Finally, we use OECD data to assess the extent of active labour market policies (ALMPs) in a given country. As in the case of unemployment expenditures, ALMPs can help in buffering the consequences of job loss and help reintegrate unemployed workers in the labour market (Lübke and Erlinghagen 2014; Van Oorschot and Chung 2014). All the contextual-level predictors included in the models change across countries, but also between the two years of survey. Because the interviews are generally conducted in the middle of the year, while some yearly country indicators are averages over the whole year, we use the value of the previous year for all contextual variables. In other words, for each country, all the level-2 variables are observed in 2003 and 2009.

We use a multilevel mixed-effects regression to analyze how the individual and contextual factors described above affect perceptions of job security. Since our first dependent variable is measured on a 4-point ordinal scale, we specify an ordered regression model. Unlike linear models, where the intervals between values are assumed to be equally spaced, ordinal models acknowledge that values are ordered, but make no assumptions regarding the distance between any two values. For instance, in our case, the psychological leap between responding "Not at all true" and "A little true" to the statement "My job is secure" may be different from the one between responding "A little true" and "Quite true". In the first case, the difference is between being essentially certain that one's position is precarious and recognizing some certain degree of doubt, while in the second case the difference is between two degrees of doubt – which are more abstract, and therefore separated by less clear boundaries. Ordered regression models take care of this characteristics by

modelling the probability to be in a certain category against the probability to be in the previous one. Like other generalized linear models, they estimate the effect of the independent variables on a linear predictor, that is related to the outcome by the means of a link function. In this case we use a *logit* link function, therefore specifying a model that is equivalent to the more common logistic regression. The only difference is that ordinal models do not estimate an actual *intercept* (i.e. the value of the linear predictor when all independent variables take value zero), but a number of *cut-points*, which varies depending on the number of categories that the variable takes. Since in our care there are 4 categories, the model will estimate 3 cut-points: one between "Not at all true" and "A little true", one between "A little true" and "Quite true", and one between "Quite true" and "Very true". Like with intercepts, the estimated cut-points values reflect the (transformed) probability to be in the category after the cut-point against the probability to be in the category before the cut-point when all predictors have value zero. The ordinal nature of the scale is reflected by the fact that the distance between any two cut-points is not assumed to be constant, but can vary considerably across the scale. Since our second variable is coded on a 10-point scale, we treat it as continuous and estimate a multilevel linear regression model with random effects.

Our data are structured hierarchically, with individual respondents nested within countries and years. While this would normally require modelling a cross-classified multilevel structure, we only have two year units, 2004 and 2010. Hence, to take into account time variation, we include one dummy variable taking value 1 for all the cases observed in 2010. The coefficient of this variable reflects how much more (or less) secure people perceive their job in post-crisis times compared to the pre-crisis. Of course, this effect should vary between countries: as we have seen in Figure 3, in some places individuals became, on average, more secure about their job, and in others less. We take into account this source of variation by nesting individuals within country-year and country units. In this way, we take into account the variation between individuals belonging to different countries, we estimate the effect of being in a post-crisis year on the whole sample, and we make sure this effect differs in different countries. Moreover, since our contextual-level predictors vary between countries but also between years, we make sure that the estimated standard errors of the contextual effects are clustered at the appropriate level.

For each of the two response variables we specify three models. The first is the "empty" model where only the cut-points, the year 2010 dummy, and the variance of the intercepts at the country-year and country level are estimated. As we said earlier, ordinal models do not provide an estimate of an intercept, but rather of the cut-points. The unit-specific values estimated here can be interpreted as unit-specific averages: when combined with the cut-points and converted into

probabilities, they tell how much is the probability to be in all four categories when all the predictors are zero. Hence, their variances reflect how much variation there is in the data among country-year averages and country averages. The second models that we estimate includes all the individual predictors discussed above, but no contextual predictors. Finally, the third model includes all individual and contextual-level predictors. We estimate three models, improving the model specification step by step so that we can assess how much the individual and contextual predictors explain of the variance between countries, by observing the extent to which the variance of the intercepts decreases the more variables we add.

	Model 1		Model 2		Model 3		
	Coef.	S.E	Coef.	S.E	Coef.	S.E	
Gender (female)			0.009	(0.024)	0.010	(0.024)	
Age			0.004	(0.001) ***	0.004	(0.001) **	
Foreigner			-0.212	(0.056) ***	-0.212	(0.056) **	
Education (3 categories)			0.167	(0.018) ***	0.167	(0.018) **	
Union Member			0.084	(0.030) **	0.083	(0.030) **	
Fixed-term Contract			-1.050	(0.038) ***	-1.049	(0.038) **	
No Contract			-0.509	(0.058) ***	-0.511	(0.058) **	
Company Size			0.025	(0.010) **	0.025	(0.010) **	
Industry: ^b Public Administration			0.439	(0.048) ***	0.440	(0.048) **	
Industry: b Manufacture			-0.285	(0.033) ***	-0.285	(0.033) **	
Industry: b Agriculture & Mining			-0.012	(0.078)	-0.012	(0.078)	
$\mathrm{GDP}^{\mathrm{a}}$					0.320	(0.171) +	
Unemployment Rate ^a					-0.183	(0.091) *	
Active LMP ^a					0.288	(0.132) *	
EPL ^a (regular jobs)					-0.257	(0.141) +	
EPL ^a (temporary jobs)					0.111	(0.117)	
Year 2010	-0.051	(0.129)	-0.092	(0.134)	0.233	(0.244)	
Thresholds							
1 2	-1.894	(0.180)	-2.086	(0.177)	-1.877	(0.176)	
2 3	-0.639	(0.179)	-0.781	(0.176)	-0.572	(0.176)	
3 4	0.916	(0.179)	0.834	(0.176)	1.043	(0.176)	
Variance Random Intercepts							
Country:Year	0.128		0.139		0.100		
Country	0.379		0.340		0.159		
N Respondents	24007		24007		24007		
N Country:Year	32		32		32		
N Countries		16		16		16	
AIC	61249		59966		59960		
Log Likelihood	-30619		-29966		-29958		

^a Values refer to the previous year; ^b Baseline category: Service Sector

TABLE 1. Coefficients of the logistic multilevel analysis of job security.

^{&#}x27;+=p<0.1; *=p<0.05; **=p<0.01; ***=p<0.001

	Model 4		Mo	odel 5	Model 6	
	Coef.	S.E	Coef.	S.E	Coef.	S.E
Gender (female)			-0,205	(0,034) *	-0,205	(0,034) *
Age			-0,039	(0,002) *	-0,039	(0,002) *
Foreigner			0,231	(0,080) *	0,228	(0,080) *
Education (3 categories)			0,264	(0,025) *	0,264	(0,025) *
Union Member			-0,161	(0,042) *	-0,162	(0,042) *
Fixed-term Contract			-0,178	(0,052) *	-0,177	(0,052) *
No Contract			-0,003	(0,080)	-0,003	(0,080)
Company Size			-0,053	(0,014) *	-0,053	(0,014) *
Industry: b Public Administration			-0,697	(0,065) *	-0,696	(0,065) *
Industry: b Manufacture			-0,448	(0,047) *	-0,448	(0,047) *
Industry: b Agriculture & Mining			-0,226	(0,110) *	-0,225	(0,110) *
GDP ^a					0,587	(0,198) *
Unemployment Rate ^a					-0,492	(0,113) *
Active LMP ^a					0,243	(0,196)
EPL ^a (regular jobs)					-0,195	(0,217)
EPL ^a (temporary jobs)					-0,203	(0,155)
Year 2010	0,2376	(0,212)	0,245	(0,220)	0,926	(0,283) *
Intercept	4,420	(0,217) *	4,547	(0,233) *	4,120	(0,241) *
S.D. Random Intercepts						
Country:Year	0,592		0,139		0,100	
Country	0,626					
Residual	2,648		0,340		0,159	
N Respondents	23852		23852		23852	
N Country:Year	32		32		32	
N Countries	16		16		16	
AIC (REML)	114284		113164		113148	
Log Likelihood	-57142		-56582		-56574	

^a Values refer to the previous year; ^b Baseline category: Service Sector

* = p < 0.05

TABLE 2. Coefficients of the multilevel analysis of employability.

2.2.Results

Tables 1 and 2 show the results of our models. The first result worth discussing is that the "year 2010" dummy has no significant effect in the case of in job security but is significant and has a positive effect on employability. This means that, in the countries in our sample, there is no general difference between pre- and post-crisis regarding the extent to which people feel secure about their job but, counterintuitively, in the post crisis context people feel that their chances of obtaining a similar job are higher. Of course, failing to see an effect of the crisis on job security does not necessarily mean that the effect is not there. First, our post-crisis survey was conducted in 2010, only two years after the beginning of the financial crisis. Hence, it might just need more time for the psychological implications of changing economic conditions to reveal themselves. Second, while the model provides evidence for an *average* effect, the crisis might have affected some groups of citizens more than others. Third, the positive effect of the crisis on employability might be driven by that fact that workers who remained employed two years after the downturn perceived themselves as sufficiently competitive in the labour market.

Looking at the individual characteristics, we note that all variables have a significant on self-perceived job security effect except for gender. Older people are more likely to feel secure about their job, a finding that contradicts the findings discussed by Erlinghagen (2008), but is perfectly plausible when we consider that older people are more likely to have longer tenures. Other effects go in the expected direction. Being a foreigner implies feeling on average less secure about one's job, as well as having a fixed-term contract or having no contract at all. Moreover, education has a positive effect on perceived job security, as well as being a member of a trade union, and working for a larger company. Finally, the industry for which an individual works matters as well. Unsurprisingly, people employed in the public administration feel on average more secure about their job than those employed in the service sector. However, less intuitively, being employed in the manufacturing sector comes with significantly lower perceived security than working for the service sector. This might be driven by the fact that industry workers might have been faced with important restructurings, which might drive down their perceptions about job security.

By comparison, as expected, gender has a negative effect on employability, with women feeling less secure about finding a similar job. At the same time age and being in a fixed-term contract have a negative effect on employability. Moreover, in comparison with the service sector, workers in the public administration, industry and agriculture feel less competitive on the labour market. This effect might be driven by the higher mobility that workers in the service sector enjoy in comparison with the other sectors of the economy. At the same time, workers in industry might find it difficult to find a new job once unemployed, thus feeling less secure about their future. Surprisingly, being a foreigner has a positive impact on self-perceived employability.

Among the contextual variables, the unemployment rate has a significant effect on both job security and employability, which goes in the expected direction: the higher the level of unemployment in a given country at a certain point in time, the less secure and competitive people feel about their job, on average. To fully appreciate this effect, Figure 4 shows the predicted probabilities to be in each of the four categories of our job security variable over the range of unemployment rates observed in our data. When unemployment is at its lowest, as in countries such as Norway, Switzerland, or Ireland before the crisis, almost three quarters of the citizens find the statement "My job is secure" to be either quite true or very true. Conversely, when the unemployment is at its highest, like in Greece or Spain after the crisis, the figure drops to a half: not a small share, but substantially reduced. This finding underlines that when thinking about job security, usually workers consider the state of the economy as the main proxy for assessing their own position. It is thus not surprising that the issue of unemployment surfaced very often in the

political discourse surrounding the policy measures designed to counteract the effects of the economic crisis. However, the treatment, which as discussed earlier, involved a range of measures targeted to deregulate labour markets was nor effective in terms of addressing the unemployment issue.

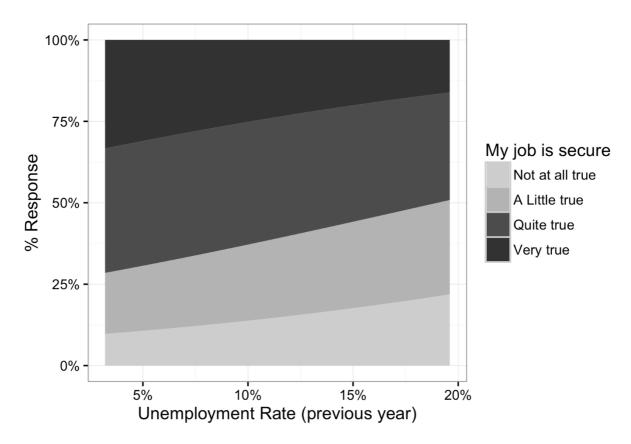


FIGURE 4a. Predicted probability of job security at different levels of unemployment.

An interesting result is the negative effect on job security, albeit only significant at p < 0.1, of EPL for regular jobs. Substantively, this result suggests that in countries with the more protected regular jobs, the more insecure workers are about their jobs. While this finding is all but robust, it suggests that employment protection legislation may not translate into jobs that are more secure. Therefore, the effect might be the result of the discrepancies that exist in many countries between the regulation and enforcement. Since EPL captures only the regulatory dimension of the labour market, while ignoring how the rules are enforced in different economies, it is possible that even though strict regulation does exist, government agencies do not necessarily enforce it. This is the case in many East European and Mediterranean countries where labour related conflicts are costly for workers and implementation issues bound. Furthermore as (Clark and Postel-Vinay 2009) note, stricter EPL can lead to longer unemployment durations and make it more difficult for workers in

atypical contracts to maintain or upgrade their labour market status. At the same time, stricter EPL might lead to more temporary jobs, and thus inflate the share of those who feel insecure about their jobs (Clark and Postel-Vinay 2009).

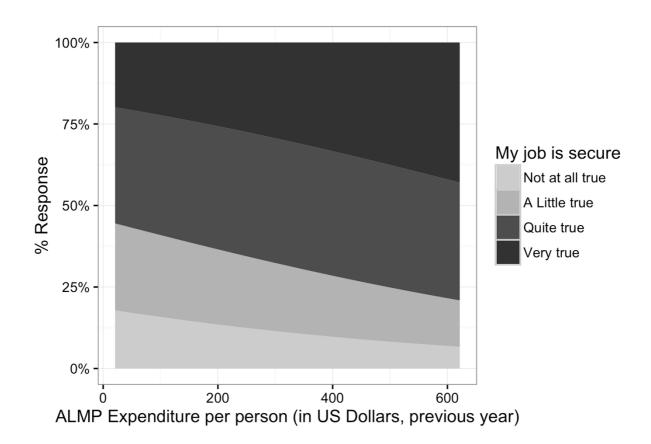


FIGURE 4b. Predicted probability of job security at different levels of ALMP expenditure.

Furthermore, GDP growth positively impacts both job security employability, albeit the effect is significant only at p < 0.1 in the case of job security. As the economy grows, people feel more secure about their job and that they have more chances of finding a similar job. Finally, we find a significant influence of ALMPs on individual perceptions about job security but no effect on employability. As Figure 4b. shows, as the expenditure per individual grows, a smaller share of individuals feel insecure about their jobs. The finding suggests that although more generous ALMPs might make workers feel more secure about their labour market status, once unemployed, ALMPs might not necessarily contribute to improving their chances of securing a similar job.

Conclusion

This chapter has analysed the impact of economic and institutional factors on workers' self-perceptions about job security and employability. It has discussed the implications of the crisis driven reforms in EPL systems and has shown that in most European countries these were associated with an increase in the number of atypical contracts. It has shown that individual perceptions about job security are negatively impacted both by stricter EPL regulations and higher unemployment level. Furthermore, the paper showed that ALMPs and GDP growth have a positive impact on perceived job security. Employability was positively impacted by GDP growth and negatively impacted by unemployment levels. At the same time, the paper found that a host of individual level predictors impacted perceptions about job security: whereas union membership, education, the size of the company as well as working in the public sector lead to higher levels of self-perceived job security, being a foreigner, being on a fixed-term contract and working in industry are associated with lower rankings of self-perceived job security. In comparison, self-perceived employability was negatively associated with gender, age and being on an atypical contract.

In light of these findings, a number of questions remain open about the links between institutions and individual perceptions about job security and employability. First, it seems that workers do not trust that ALMPs are an effective tool for ensuring their re-employment. Second, the links between EPL and individual perceptions about job security require more examination. Although are findings remain rather speculative in this aspect, it might be that what we are capturing in our analysis is a labour market dualisation effect in which outsiders do not benefit from increases in EPL for regular workers negatively impact workers on atypical contracts. Third, rather than reacting to institutional changes, workers' self-perceptions about job security and employability are more sensitive to macroeconomic changes, particularly in GDP levels and unemployment.

References

- Adascalitei, Dragos, and Clemente Pignatti. 2015. "Labour Market Reforms since the Crisis: Drivers and Consequences." *ILO Working Paper Series* 5.
- Bender, Keith A., and Peter J. Sloane. 1999. "Trade Union Membership, Tenure and the Level of Job Insecurity." *Applied Economics* 31 (1): 123–135.
- Berntson, Erik, Magnus Sverke, and Staffan Marklund. 2006. "Predicting Perceived Employability: Human Capital or Labour Market Opportunities?" *Economic and Industrial Democracy* 27 (2): 223–244.
- Blanchard, Olivier. 2006. "European Unemployment: The Evolution of Facts and Ideas." *Economic Policy* 21 (45): 7–59.
- Bohle, Dorothee, and Béla Greskovits. 2007. "Neoliberalism, Embedded Neoliberalism and Neocorporatism: Towards Transnational Capitalism in Central-Eastern Europe." West European Politics 30 (3): 443–466.
- ——. 2012. *Capitalist Diversity on Europe's Periphery*. Cornell Studies in Political Economy. Ithaca, NY: Cornell University Press.
- Chung, Heejung, and Wim van Oorschot. 2012. "The Impact of Perceived and Actual Unemployment Benefit Generosity and Unemployment Rates on the Employment Security of Workers." In *The Future of the Welfare State*, by Heikki Ervasti, Jørgen Goul Andersen, Torben Fridberg, and Kristen Ringdal. Edward Elgar Publishing. http://www.elgaronline.com/view/9781781001264.00008.xml.
- Clark, A., and F. Postel-Vinay. 2009. "Job Security and Job Protection." *Oxford Economic Papers* 61 (2): 207–39. doi:10.1093/oep/gpn017.
- Countouris, N., and R. Horton. 2009. "The Temporary Agency Work Directive: Another Broken Promise?" *Industrial Law Journal* 38 (3): 329–38. doi:10.1093/indlaw/dwp015.
- Cutuli, G., and R. Guetto. 2013. "Fixed-Term Contracts, Economic Conjuncture, and Training Opportunities: A Comparative Analysis Across European Labour Markets." *European Sociological Review* 29 (3): 616–29. doi:10.1093/esr/jcs011.
- Erlinghagen, Marcel. 2008. "Self-Perceived Job Insecurity and Social Context: A Multi-Level Analysis of 17 European Countries." *European Sociological Review* 24 (2): 183–97. doi:10.1093/esr/jcm042.
- European Commission. 2010. "Communication from the European Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions: An Agenda for New Skills and Jobs: A European Contribution towards Full Employment." Brussels: European Commission.
- Gallie, Duncan. 2013. Economic Crisis, Quality of Work, and Social Integration: The European Experience. OUP Oxford.
- Hadjivassiliou, Kari P., Arianna Tassinari, Stefan Speckesser, and Sam Swift. 2015. "Country Report–United Kingdom," STYLE Working Papers, . http://www.style-research.eu/wordpress/wp-content/uploads/2015/03/UK_WP3-Task-3-National-Report-IES-17.6.2015.pdf.

- Horwitz, Laszlo, and Martin Myant. 2015. "Spain's Labour Market Reforms: The Road to Employment or to Unemployment?" 03. Brussels, Belgium: European Trade Union Institute.
- ILO. 2014. *Greece Productive Jobs for Greece*. Studies on Growth with Equity. Geneva, Switzerland: International Labour Office.
- Lübke, Christiane, and Marcel Erlinghagen. 2014. "Self-Perceived Job Insecurity across Europe over Time: Does Changing Context Matter?" *Journal of European Social Policy* 24 (4): 319–336.
- OECD. 2013. "The 2012 Labour Market Reform in Spain: A Preliminary Assessment."
- ——. 2015. *In It Together: Why Less Inequality Benefits All*. OECD Publishing. http://www.oecd-ilibrary.org/employment/in-it-together-why-less-inequality-benefits-all 9789264235120-en.
- Paugam, Serge, and Ying Zhou. 2007. "Job Insecurity." In *Employment Regimes and the Quality of Work*, edited by Duncan Gallie, 179–204. Oxford University Press. http://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780199230105.001.0001/acprof-9780199230105-chapter-6.
- Schnabel, Claus. 2002. "Determinants of Trade Union Membership."

 Diskussionspapiere/Friedrich-Alexander-Universität Erlangen-Nürnberg, Lehrstuhl für Arbeitsmarkt-und Regionalpolitik. http://www.econstor.eu/handle/10419/28298.
- Sjöberg, Ola. 2010. "Social Insurance as a Collective Resource: Unemployment Benefits, Job Insecurity and Subjective Well-Being in a Comparative Perspective." *Social Forces* 88 (3): 1281–1304. doi:10.1353/sof.0.0293.
- Van Oorschot, Wim, and Heejung Chung. 2014. "Feelings of Dual-Insecurity among European Workers: A Multi-Level Analysis." *European Journal of Industrial Relations*, 0959680114523199.
- World Bank. 2013. The World Development Report 2013: Jobs. Washington, DC.