Long-Term Unemployment Risks in Europe

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Introduction: The return of long-term unemployment in the current crisis[1]

From the 1970s until the end of the 1990s, high long-term unemployment (LTU) had been a major plague affecting the regulated European labour markets, as the Eurosclerosis debate has shown (Boeri, Garibaldi 2009). High LTU levels have been analysed as an outcome of rigid labour markets, i.e. of markets characterised by strict employment protection legislation, strong unions, high unemployment benefits, long benefit duration, and a high tax wedge between take-home pay and labour costs (Siebert 1997; Nickell 1997). LTU is a major risk for growth and competitiveness because it reduces the available labour force and is thus highly correlated with low employment rates. This can be explained by the erosion of skills, motivation and general attachment to the labour market during longer periods of unemployment, which Blanchard (2006) has termed the hysteresis effect of LTU: Thus, even a short crisis may have long-term, structural consequences for the labour market because unemployed persons often cannot return to their previous career step or levels of pay, job satisfaction and life satisfaction, even when they find a new job. High LTU rates therefore reflect a profound divide between insiders and outsiders; they indicate that a significant part of the labour force is durably excluded from the labour market.

In the decade before the beginning of the current financial, economic and sovereign debt crisis (the so-called »Great Recession«), the European labour markets became more inclusive. This was partly the result of reforms of national benefit and labour market policies, but especially the result of activation policies proposed by international organisations such as the OECD, the

1 This contribution is a shortened version of an article which will be published in the Journal of European Social Policy (issue 25.4).

ILO or the EU. In this way, structural unemployment could be reduced and employment rates increased in many countries. In the economic slump since 2009, however, the move towards more flexible labour markets, higher employment rates and lower (long-term) unemployment rates seems to have been reversed. Younger and less skilled persons, migrants and especially unemployed persons are once again strongly excluded from the labour market. After a significant reduction of the LTU share, i.e. the share of long-term unemployed (12 months or more as a percentage of total unemployment) in the decade before the crisis (2000: 46.4 %; 2009: 33.3 % of the unemployed), LTU has once again risen to currently 47.4 % (2013) in the EU-28. *The question is if this (at first sight only cyclical) increase of unemployment and LTU rates is related to the return and deepening of different forms of labour market segmentation between insiders and outsiders.* In this case, the increasing LTU shares since 2009 could effectuate the durable exclusion of a significant proportion of the labour force from employment.

As indicators of the possible return of segmented labour markets, this article discusses the social distribution of the risks to become unemployed and remain unemployed. These risks are not equally distributed, as the debate on insider-outsider divisions and dualisation processes has shown (Emmenegger et al. 2012). The question is if the current crisis and the related increase of unemployment and LTU rates are related to an increasing labour market polarisation and dualisation alongside an increasing marginalisation of already vulnerable groups – three dimensions of labour market segmentation.[2] The *polarisation* of labour markets consists in the differentiation between good and bad jobs due to institutional rules that impede mobility between the various labour market segments. A second dimension of segmentation processes can be termed *dualisation,* referring to organisational and occupational differences between qualified and less qualified employees and occupations, and also between permanent and temporary contracts. A third segmentation dimension can be termed *marginalisation*, a concept that refers to »the process of individuals being relegated to the margins of society« due to broader societal discrimination processes (Emmenegger et al. 2012: 11-12). In the case of labour markets, marginalisation implies the durable exclusion of disadvantaged groups from the labour market. These three, empirically related facets of labour market segmentation can be interpreted as the result of different national institutions (labour market policies, industrial relations, welfare systems), organisational and occupational policies, and broader societal discrimination processes.

In the following, it will be discussed which groups are mainly affected by the risk of becoming and remaining unemployed, whether these risks have increased for some groups in the current financial and debt crisis, and which institutional contexts and personal and occupational characteristics can explain these dynamics. *In particular, it will be examined to what extent the risk of becoming and remaining unemployed is the result of three different facets of labour market segmentation: firstly, the institutionally stabilised polarisation between protected labour market insiders and less protected outsiders (often with temporary contracts); secondly, the occupational dualisation between high- and low-skilled employees and occupations (Schwander and Häusermann 2013); and*

2 Labour market segmentation has been defined as »the historical process whereby political economic forces encourage the division of the labor market into separate submarkets, or segments, distinguished by different labor market characteristics and behavioral rules« (Reich et al. 1973: 359).

thirdly, the marginalisation of specific social groups defined on the basis of ascriptive criteria (e.g. age, gender, migration, private living conditions). After a discussion of the state of the art and the methodological approach of this study, this research question is discussed on the basis of EU-SILC data for 2012. The article concludes with a short summary and discussion of the posited return of segmented labour markets.

Institutional, Occupational and Individual Determinants of Short and Long-Term Unemployment Risks

Labour markets are »arenas in which workers exchange their labor power in return for wages, status, and other job rewards« (Kalleberg, Sørensen 1979: 351). While neoclassical approaches analyse labour market dynamics as determined by supply and demand, institutional approaches in labour economics focus on the institutional regulation of labour market processes. From a neoclassical perspective, such institutions are merely considered market distortions or »rigidities« that prevent an equilibrium between the demand and supply of labour (Siebert 1997). Examples of such »rigidities« are social benefits, high unemployment replacement rates, minimum wages, trade unions, wage bargaining systems, and reduced wage differential combined with a low educational level at the bottom of the labour market (Nickell 1977; Blanchard 2006). The level of unemployment and also long-term unemployment has been explained by these institutional factors which stabilise the relative advantages of labour market insiders in comparison to outsiders, i.e. the *polarisation* of the labour market (cf. Boeri 2011 for a comprehensive overview). Thus, according to leading representatives of a neo-classical labour market perspective,

– *stricter employment protection legislation* »will tend to reduce the inflow into unemployment and, because they make firms more cautious about hiring, will also reduce the flow out of unemployment into work« (Nickell 1997: 66). Bentolila et al. (2012) have highlighted the importance of the difference between the employment protection legislation (EPL) for fixed-term and permanent contracts, because larger gaps between dismissal costs for permanent and temporary jobs might increase the unemployment risks especially for temporary workers. In addition to the EPL summary indicator, differences between the employment protection legislation for regular and temporary workers will be included in the following models. A higher EPL level should be correlated with higher unemployment while a higher gap should lower the risk of long-term unemployment for persons with a fixed-term contract, because firing costs are lower (Boeri 2011).
– An essential claim of the neoclassical analysis of »labour market rigidity« is that *high social expenditures, high unemployment benefits and long entitlement periods* decrease financial incentives for taking up a new job and may therefore contribute to prolonged unemployment.
– Negative impacts can be expected especially when *job search requirements* (so-called conditionality) are low. This refers to the role of *activation strategies,* which may increase the obligation, possibility and interest in taking up a new job through various enabling and demanding measures.

It can therefore be expected that the risks of becoming and remaining unemployed are lower in countries with comprehensive activation policies, weaker social protection, weaker unions, and lower income replacement rates. Less strict employment protection legislation and a lower difference between employment protection for permanent and temporary workers might increase the risk of becoming unemployed, but decrease the risk of remaining unemployed, i.e. to become long-term unemployed (H1) (cf. Table 1).

As set apart from neo-classical and institutional approaches, a different explanation of labour market segmentation processes has been proposed by studies focusing on the exclusion of outsider groups from attractive employment opportunities. In this perspective, labour market outsiders can be defined as »individuals who incur a particularly high probability of being in atypical employment and/or unemployment« (Schwander, Häusermann 2013: 252). The dualisation approach focuses not so much on institutional labour market regulations but rather on the dynamics of internal labour markets. Thus, at the company level, insider-outsider differences will be established when labour turnover costs are high (Lindbeck, Snower 1998). Labour turnover costs therefore operate as entry barriers to inner-organisational, privileged employment opportunities. Although high labour turnover costs may also be the result of institutional regulations, for example strict employment protection, this approach focuses mainly on the organisational requirements and costs associated with making outsiders productive. Examples of such costs are higher quitting rates or high hiring and training costs, high costs for monitoring and control, and high repair and quality costs or higher (perceived) costs of absenteeism due to health problems that may prevent employers from employing outsiders in spite of lower wages having to be paid for them (Kalleberg 2009: 9). An important source of production-related costs is the tacit knowledge of employees, which is hard to replace and which tends to be closely linked to the qualification and occupational level of employees. Therefore, employees who have managed to accede to internal labour markets have the opportunity to accumulate company-specific skills, competences and contacts, and to evade wage competition on the external, secondary labour market characterised by higher unemployment risks (Doeringer, Piore 1971). According to the *dualisation* approach, labour market segmentation processes and the related unemployment risks can therefore be explained by processes of social closure between different organisational, occupational and skill groups.

However, a high unemployment rate does not necessarily imply a high LTU rate because unemployment risks could also be equally distributed among different groups. It is therefore necessary to analyse precisely which unemployed remain in unemployment. According to Lindbeck (2001: 15956), the persistence of some groups in unemployment can be explained by »the loss of skill among individuals who have been unemployed for a long time; (by) endogenous changes in preferences in favor of leisure or household work; and (by) the breakdown of social norms in favor of work and hence the emergence of unemployment cultures. (…) Long spells of unemployment may also function as a negative signal to prospective employers about the quality of individual workers.«

Thus, it can be expected that lower-skilled employees in less demanding occupations with non-standard employment contracts and difficult health conditions will have a higher risk of short and long-term unemployment than others (H2).

Besides the institutional, organisational and occupational dynamics of labour market segmentation, current studies (Emmeneger et al. 2012; Schwander, Häusermann 2013) refer to a third dimension of segmentation processes, which can be designated as marginalisation. This debate focuses on the relationship between insider-outsider divisions in the population at large and the labour market more specifically. Already the founding fathers of segmentation theory, Doeringer and Piore (1971), expected that women, young people, and foreigners and persons with a different ethnic background have considerably worse opportunities for acceding to privileged positions in internal labour markets. In the current crisis, older, male and migrant workers seem to have a higher risk of staying unemployed for at least a year. Therefore, in addition to institutional and occupational explanations for the risk of becoming long-term unemployed, ascriptive characteristics of the workforce have to be taken into account. What I prefer to call »marginalisation«, refers to the differential treatment of social groups not only in the labour market but also in the educational system and the welfare state, i.e. discrimination (Kalleberg 2009: 10). From such a viewpoint, the impact of individual characteristics on unemployment and LTU risks is not only limited to achievement-based criteria (skills, occupational status), but also refers to ascriptive criteria, i.e. migration status, age, gender, or private living conditions. *I therefore expect that the risks of becoming and remaining unemployed vary significantly by individual age, migration background, gender and even private living and household conditions. Older persons, single parents, women and employees with a migration background will be more strongly affected by long-term unemployment than others (H3).*

Data and Methods

The LTU level of a country can be conceived as the result of two different types of flows. Firstly, it is determined by flows from employment to short-term unemployment (STU). High transition rates from employment into unemployment contribute *ceteris paribus* to high unemployment and later to a high long-term unemployment rate. Secondly, the LTU level is *ex negativo* determined by the flows out of unemployment, i.e. into inactivity or employment. High exit rates from unemployment into new jobs, training, early retirement, inability, or unpaid domestic and care work will reduce the share of short-term unemployed (i.e. those unemployed less than a year) while *ceteris paribus* increasing the share of long-term unemployed. Hence, the higher the transition rates from unemployment into employment or inactivity, the lower the persistence rate, i.e. the share of persons remaining in unemployment. Statistically, the entry rate into unemployment can be approximated by the share of short-term unemployed in relation to the employed (excluding entries from inactivity into unemployment because the inactive are a very broad category whose motives to enter the labour force are extremely heterogeneous). This indicator will be termed STU risk below. The persistence rate can be estimated by the share of long-term unemployed as a percentage of all unemployed (LTU risk). Those two risks will be used as the dependent variables of the following models.

Tab. 1: The variables used, their operationalisation and their expected and observed effects.

Hypothesis	Variable	Operationalisation	Data Source	Expected	Observed
	Dependent				
	Short-term unemployment risk of employed	Unemployed persons (less than one year) who were employed at least one month in the previous year (in relation to all persons who were employed at least one month in the previous year) (1: short-term unemployed (STU); 0: Not STU).	EU-SILC (pl030, pl031, pl080, pl073-pl076)		
	Long-term unemployment risk of unemployed	Unemployed for 12 months in the previous year (in relation to all unemployed) (1: long-term unemployed (LTU); 0: Not LTU).	EU-SILC (pl030, pl031, pl080)		
	Independent	micro-level			
H3	Gender	1: »male« (ref. category); 2: »female«	EU-SILC (rb090)	+/+	--/+
H3	Age class	1: 15-24 years; 2: »25 to 54 years«; ref. category; 3 »55 years and older«)	EU-SILC (rx020)	Old: +/+	Old: -/+
H3	Household type	1 »One person household«; 2: »Adults, no children«; 3 «Single parent household«; 4 »Adults with children«; ref. category))	EU-SILC (hx060)	Single parent: +/+	+/+
H3	Migration Status	Foreign nationality or born abroad (0: domestic origin (ref. category); 1: foreign origin)	EU-SILC (pb210 (a)	+/+	+/0
H2	Health	Self-perceived health (1: »very good«; 2: »good«; 3: »fair«; 4: »bad«; 5: »very bad«)	EU-SILC (ph010)	+/+	(+)/+
H2	Educational level	Highest ISCED level attained (3: Tertiary education - levels 5-6; ref. category; 2: Upper secondary and post-secondary non-tertiary education (3-4); 1: Pre-primary, primary and lower secondary education (0-2)	EU-SILC (pe040)	+/+	+/+
H2	Occupational skill level (ISCO08)	1: »Simple and routine physical or manual tasks«; 2: »operating machinery and electronic equipment; driving vehicles; maintenance and repair …manipulation, ordering and storage of information« (ref. category); 3: »complex technical and practical tasks«; 4: »problem-solving, decision-making, creativity.« (ILO 2012: 12-3)	EU-SILC (pl050; pl051)	High: -/-	-/-
H2	Type of contract	1: »permanent job« (ref. category); 2: »temporary job«	EU-SILC (pl140)	+/+	+/-
	Independent macro-level				
	Economic growth	Average GDP growth (3 previous years)	Eurostat	-/-	-/(+)
	Employment level	Employment rates in % of all persons aged 15 to 64 years	Eurostat	-/-	-/-
H2	Activation	Expenditures for active labour market policies (in % of GDP; per percentage point of unemployment*100,000)	Eurostat (LMP database)	-/-	(-)/-
H1	Social protection	Social protection expenditure includes social benefits, administration costs and other expenditure linked to social protection schemes (% of GDP)	Eurostat (ESSPROS)	+/+	(-)/0
H1	Unemployment replacement	Net replacement rates for a married single-earner couple with 2 children, average wage in the initial phase of unemployment	OECD	+/+	0/- 0
H1	EPL	Employment Protection Legislation for temporary jobs (v1)	OECD	+/-	+ 0/0
H1	EPL difference	Difference between the Employment Protection Legislation for permanent and temporary employees (eplregi_v1-epltemp_v1)	OECD and estimations (for BG, RO)	-/-	- +/0
H1	Union density	Trade Union Density Rate: Ratio of wage and salary earners who are trade union members, divided by the total number of wage and salary earners	OECD and J.Visser, ICTWSS 4.1	+/+	+ 0/0

Explanations: The expected and observed effects refer to the short-term unemployment (STU) risk in percentage of the employed (first sign) respective the long-term unemployment (LTU) risk in percentage of the unemployed (second sign). + refers to an effect significantly different from zero, - refers to an effect significantly lower than zero; 0 to an effect that does not differ significantly from zero.

The three hypotheses previously developed will be discussed on the basis of the cross-sectional EU-SILC (Statistics on Income and Living Conditions) data for 2012 for 26 European countries (EU-28 plus Norway without Croatia, Cyprus, and Malta). The EU-SILC data are currently the most comprehensive data source for comparative analyses of income and employment conditions in Europe. They will therefore be used below in order to analyse the social distribution of STU and LTU risks. The impact of the national institutional context is taken into account on the basis of data provided by EUROSTAT and the OECD (cf. Table 1).

Our research hypotheses raise the question as to which individual and institutional factors affect the probability that an employed person will become STU and that an unemployed person is long-term unemployed. Both variables are binary, for which reason the adequate method to be used is binary logistic regressions. Since the three research hypotheses focus on the individual and the national level, multi-level models and more specifically the logistic two-level random intercept models which can be calculated with the xtmelogit algorithm of STATA 13 will be used (Hox 2010: chapter 6). The coefficients in the following tables are average marginal effects (AME) which express the average effect of the respective category of the independent variable on the dependent variable in comparison to the reference category. In 2012, for example, the LTU risk of unemployed persons with a low education was 11.5 percentage points higher than for unemployed persons with a high education (Table 2, column 6). AMEs can be compared across groups, samples and models (Mood 2010).

Results

In models (1) and (4) of Table 2, the STU risks of the employed and the LTU risks of the unemployed are described without explanatory variables. The next two models (2) and (5) include the occupational, qualificational and ascriptive characteristics of the employed and unemployed in order to determine which individual and household-related factors influence the risk of becoming and remaining unemployed. In addition to these individual factors, models (3) and (6) in Table 2 include the previously discussed contextual and control variables in order to determine which aspects of the national context influence the STU and LTU risks of the employed (column 3) and the unemployed (column 6).

The between-country variance in Table 2, model (1) is 0.96, which corresponds to 22.6 % of the total variance of 4.25. Nearly a quarter of the STU risk can be explained by the included particularities of the 26 countries. The LTU risk of the unemployed is more equally spread among nations: Only 10.8 % of the variance can be explained by national particularities.

Tab. 2: Unemployment risk of the employed, and long-term unemployment risk of the unemployed (2012)

	Short-term unemployment risk of the employed			Long-term unemployment risk of the unemployed		
	Empty model (1)	Individual (2)	Contextual (3)	Empty model (4)	Individual (5)	Contextual (6)
Women		-0.005**	-0.005**		0.023**	0.023**
		(-8.70)	(-8.58)		(3.05)	(3.14)
Age group (ref.: 25 to 54 years)						
15-24 years		0.000	0.000		-0.128**	-0.126**
		(0.11)	(0.29)		(-9.64)	(-9.54)
55 years +		-0.025**	-0.026**		0.092**	0.088**
		(-36.70)	(-36.74)		(8.48)	(8.52)
Household type (ref.: Adults with children)						
One person household		0.001	0.001		0.074**	0.073**
		(1.34)	(1.48)		(5.60)	(5.82)
Adults, no child		0.002**	0.002**		0.027**	0.028**
		(3.32)	(3.51)		(3.25)	(3.48)
Single parent household		0.006**	0.006**		0.015	0.017
		(4.05)	(4.12)		(0.75)	(0.90)
Foreign nationality or born abroad		0.006**	0.007**		-0.002	0.006
		(6.76)	(7.22)		(-0.16)	(0.52)
Health		0.000	0.000		0.052**	0.052**
		(0.44)	(0.51)		(11.40)	(11.59)
Educational level (ref.: high)						
Low		0.003**	0.002*		0.122**	0.115**
		(2.87)	(2.50)		(9.16)	(8.81)
Medium		0.002+	0.001+		0.061**	0.058**
		(1.79)	(1.66)		(4.92)	(4.72)
ISCO skill levels (ref.: Operating, repair, information processing (2))						
Simple tasks (1)		0.006**	0.005**		-0.020*	-0.022*
		(6.69)	(6.23)		(-2.12)	(-2.47)
Complex tasks (3)		-0.009**	-0.009**		-0.027*	-0.025+
		(-9.76)	(-9.74)		(-1.98)	(-1.88)
Problem-solving, decision-making, creativity (4)		-0.015**	-0.016**		-0.031+	-0.030+
		(-16.91)	(-16.94)		(-1.84)	(-1.88)
Temporary job		0.057**	0.058**		-0.090**	-0.090**
		(65.62)	(64.71)		(-11.23)	(-11.64)
Economic growth			-0.003			0.009
			(-1.27)			(0.63)
Employment level			-0.0001**			-0.004**
			(-5.99)			(-5.47)
Activation			0.003*			-0.023**
			(2.02)			(-2.81)
Social protection			-0.002+			0.008
			(-1.80)			(1.19)
Unemployment replacement			0.000			-0.002
			(0.13)			(-0.93)
Employment protection			0.010			-0.065
			(1.31)			(-1.31)
EPL difference permanent & temporary jobs			0.004			-0.003
			(0.92)			(-0.12)
Union density			-0.000			0.002
			(-1.19)			(1.10)
No.	274408	274408	274408	18970	18970	18970
chi^2		8601	8624		876	926
Between-country variance	0.96	0.806	0.548	0.397	0.466	0.191
Variance (total)	4.25	4.096	3.837	3.687	3.756	3.481
Intraclass correlation	0.226	0.197	0.143	0.108	0.124	0.055
McFadden pseudo-R^2		0.132	0.133		0.664	0.664
AIC	72538	62984	62958	25352	24435	24402
BIC	72559	63153	63210	25368	24561	24590
Log-Likelihood	-36300	-31500	-31500	-12700	-12200	-12200

This table shows the results of different binary logistic two-level random intercept models with the dependent dichotomous variable »long-term unemployment« (yes or no). The included populations are either the labour force or the unemployed of 26 European countries (EU-28 plus Norway without Croatia, Cyprus, and Malta). The coefficients are average marginal effects (cf. Mood 2010). Figures in parentheses: t-values. The AIC (Akaike information criterion) and the BIC (Bayes information criterion) are measures of the relative quality of the statistical models. Legend: + p<.1; *p<.05; ** p<.01. Source: Own calculations on the basis of EU-SILC UDB 2012 from August 2014.

In the next step, the ascriptive, occupational and qualification characteristics of the short-term (model 2) and long-term unemployed (model 5) are taken into account. While the STU risk of *female* employed is significantly lower, the LTU risk of female unemployed is 2.3 % percentage points higher than the risk of men. The crisis thus seems to have accelerated the structural transformation of the economy to a service-based one – at the expense of the male-dominated industrial sector. Given this background, the structurally higher LTU risk of women is surprising and can be considered as indicative of the *marginalisation* of female unemployed (H3) – a sharp contrast to the better and improving position of employed women.

The STU risk of *younger persons* (15-24 years) differs not very much from prime-age employees, which illustrates that the high youth unemployment rates of some Mediterranean countries are mostly the result of difficulties in finding a first job. For younger unemployed, however, LTU risks are lower than those of prime-age persons. This at first sight positive observation however might disguise increasing inactivity rates of younger persons which are completely excluded from the labour market.

The STU unemployment risk of *older employees* (55 years and more) is 2.6 % percentage points lower than that of prime-age employees, while the LTU risk of older unemployed is 8.8 percentage points higher. This illustrates that employment protection for older employees is higher, but once older employees lose their job, their situation is much worse than that of younger persons especially in a economic downturn. The examples of female, younger and older persons show that the criteria for the dismissal and for the recruitment of these groups differ significantly: Women and older employees have a lower STU, but a higher LTU risk. This is exactly the contrary of the situation of younger persons.

Another group with clearly higher STU risks are *single parent households* – another sign of marginalisation (H3). In comparison to adults with children, their unemployment risk is 0.6 percentage points higher. However, the LTU risk of single parents does not differ significantly from other groups, which might reflect the effects of targeted welfare and childcare policies on the one side and on the other side the (slightly) above-average qualifications and occupational positions of single parents.

Employees with a *migration background* have a higher STU risk – a clear hint to marginalisation (H3). However, the LTU risk of unemployed migrants does not differ significantly from that of native unemployed.

The STU risk of *employees with poor health* was significantly higher before, but (surprisingly) not during the crisis, while the LTU risk of unemployed with poor health is significantly higher than the corresponding risk of other groups – an indicator for health-related forms of labour market dualisation (H2).

Important indicators of the expected dualisation between different skill, occupational and contractual groups and labour contracts are skill-biased unemployment risks. In comparison to highly skilled persons, the STU and LTU risks of *medium and low-skilled persons* are significantly higher. In the crisis, these differences even increased: In 2012, the STU risk of low-skilled employed was 0.2 percentage points higher and the LTU risk of low-skilled unemployed was 11.5 percentage points higher than that of academically trained persons.

In a similar vein, the unemployment risk of employees varies with their occupational profile. STU risks for employees with complex tasks (e.g. technicians and associate professionals or retail managers; skill group 3) or with tasks that require problem-solving, decision-making or creativity (e.g. professionals or sales and marketing managers, skill group 4) are significantly lower than those of employees with simple (skill group 1) or operational, repairing and information-processing tasks (such as clerical support workers, services and sales workers, skilled agricultural workers, craft workers, plant and machine operators and assemblers; skill group 2). The different STU risks of occupational skill groups 1 and 2 on the one side and skill groups 3 and 4 on the other side confirm the usefulness of the »dichotomous operationalization of insiders/outsiders« proposed by Schwander and Häussermann (2013: 262). Also the clear differentiation of the STU and LTU risks of high and low-skilled employees confirms the expected dualisation of the European labour markets especially during the crisis (H2). However, a similar differentiation of LTU risks for unemployed with different occupational background could not be observed. This means that employees with less demanding tasks are more easily laid off, but they are also more easily recruited after the crisis.

Another and at least quantitatively the most important dualisation indicator (H2) is the type of employment contract. Employees with *temporary contracts* have a 5.8 percentage points higher STU risk than permanent employees. They are especially women, younger persons and low-skilled employees. However, persons with fixed-term contracts are not only dismissed more easily during the crisis, but they are also hired more easily. Their LTU risk is consistently and significantly lower than that of unemployed who previously had a permanent contract. Temps are important organisational employment buffers.

Indicators of the third type of segmentation discussed in this paper, the expected polarisation between labour market insiders and outsiders, are social and employment protection and union density. Here, higher national *social protection expenditures* reduced STU risks in 2012 because they buffered the crisis (for example via short-time work). In contradiction to neoclassical assumptions, the *level of unemployment benefits* had no significant effect on the LTU risk of the unemployed. In general, countries with higher unemployment benefits are wealthier and have a lower LTU rate. Countries with stronger unions have neither higher STU nor higher LTU risks: Thus, contrary to neoclassical assumptions, stronger *unions* with more members do not seem to aggravate the insider-outsider problems of the labour market.

Stricter *employment protection legislation* (EPL) and the difference between the EPL for temps and permanent employees had no effect on the unemployment risk of the employed. This is in accordance with neoclassical expectations. This can be explained by the end of the »honeymoon« of labour market policy reforms: Before the crisis, a deregulation of labour markets created new job opportunities and reduced unemployment risks. In the crisis, however, this effect disappears. As expected, no effects on LTU risks could be observed.

In addition to these institutional variables, expenditures for active labour market policies (in relation to the unemployment level of the country) were included in the analysis. They reduced the LTU risk significantly.

As expected, the control variables for the economic situation and the labour market, the economic growth and the employment rate had in general a negative effect on the STU risk. A higher employment level, which indicates a better inclusion of women, younger people and older employees in the labour market, reduces also the LTU risks of the unemployed.

For 2012, the individual and national characteristics of the labour force in general and the unemployed in particular respectively explain 13.2 % and 6.6 % of the initial value of the log likelihood function that which McFadden interprets similarly to R^2 in regression models as the percentage reduction of the unexplained variance. A log-likelihood ratio test shows a significant increase of the model fit by including the contextual variables.

The aim of comparative research is to reduce the variance that is »explained« by the national idiosyncrasies, i.e. to move from a »research where nation is context« to a cross-national research »where nation is the unit of analysis« (Kohn 1987: 715). The sharp reduction of the between-country variance by 45 % (models 1 and 3) and 76 % (model 4 and 6) shows that the contextual variables are relevant for explaining STU and LTU risks in Europe.

In sum: STU risks during the current crisis shows that the crisis is characterised by marginalisation and dualisation processes, especially at the expense of low-skilled, single, non-native and younger employees as well as younger employees with fixed-term contracts. Fixed-term contracts are the most important buffer of economic downturns. Women, qualified technicians, professionals and managers have a lower risk, which shows that services and high-skilled professions are less affected by economic downturns than other industries and groups. The LTU risk is higher for men, singles and sick persons and it is lower for older and high-skilled persons with a fixed-term contract. Thus, European labour markets are characterised by considerable gaps between older and younger, male and female, unskilled and skilled, foreign and domestic employees as well as between non-standard and standard employment relationships. Both the occupational and ascriptive characteristics of individuals are decisive for their STU and LTU risks. During the crisis, the effect of the institutional variables often does not correspond to neoclassical assumptions: Higher unemployment benefits and higher expenditures on activation policies reduce the unemployment risk; a lower gap between permanent and temporary jobs reduces the long-term unemployment risk. Activation policies reduced the LTU risks of unemployed.

Conclusion and Outlook

During the financial, public debt and economic crisis in Europe, unemployment and also long-term unemployment rates in Europe have increased strongly, which raised fears of an increasing solidification of patterns of labour market segmentation especially in Southern and Eastern Europe. This article discussed the distribution of unemployment risks among different social groups differentiated by gender, age, education and occupation during the current economic

crisis. Two major selection barriers on the way to a durable exclusion from the labour market were analysed: The transition from employment to short-term unemployment and the transition from short-term to long-term unemployment. On the basis of previous literature, it can be expected that the group-specific short-term unemployment risks of employees and the long-term unemployment risk of the unemployed reflect three different forms of labour market segmentation. Firstly, institutionally stabilised insider-outsider divisions between more or less protected groups (polarisation); secondly, the organisational dualisation between different educational, occupational and contractual groups; and thirdly, the marginalisation of disadvantaged groups differentiated by gender, age, family status and migration status. The empirical analyses on these segmentation processes carried out above are based on EU-SILC data for one year during the crisis (2012).

The empirical results of this paper can be summarised in two main points. Firstly, the European labour markets are strongly segmented: Younger employees, male and low-skilled employees with temporary contracts and simple tasks, migrants, singles and single parents face higher unemployment risks than natives, adults with children, and older, female and high-skilled employees with permanent contracts and demanding occupations. Secondly, the social distribution of STU and LTU risks differs for many groups because the two decisions involved (i.e. the dismissal of an employee and the recruitment of an unemployed person) follow different logics and are regulated in different ways: While the STU risk of female employees is lower than that of male employees, the LTU risk of women is higher than that of men. Hence, gender discrimination in the case of recruitments seems to be easier than in the case of dismissals. For younger and older persons, the STU and LTU risks are distributed crosswise: For older persons, the STU risk is lower but their LTU risk is higher, which can easily be explained by higher seniority and stricter employment protection rules that protect the employed but which are not always an advantage for finding a new job. For younger persons, the situation is exactly the other way around. This is also the case for persons with a fixed-term contract. Thus, temps have a higher STU and a lower LTU risk while for permanent employees, it is the other way around. Low-skilled persons/occupations and persons with fragile health generally face both a higher STU and a higher LTU risk. Higher employment rates and higher expenditures for activation policies and a smaller difference between the employment protection for permanent and temporary jobs reduce both the STU and LTU rate.

Evidence for the expected institutional forms of segmentation is far from univocal in our analysis. Stronger unions and a stricter employment protection did not show the expected negative effect on short-term employment risks; the predictions of neoclassical approaches could not be supported. Contrariwise, occupational, skill-based and organisational aspects of labour market segmentation could be convincingly demonstrated: Higher educational qualifications, a higher occupational status, a stable contractual link to the organisation by a permanent contract, and a better health status decisively reduce the risk of becoming (and in general also remaining) unemployed. The differentiation between educational and occupational skill groups indicates a stronger occupational segmentation of the labour market. However, women now face lower unemployment risks.

The current crisis may therefore contribute to the return and strengthening of pre-existing forms of labour market segmentation, which may lead to a lasting erosion of skills, motivation

and attachment to the labour market while also endangering the inclusiveness and long-term growth potential especially of the Southern and Eastern European economies. A shift to more inclusive activation and employment policies that focus on the inclusion of disadvantaged groups in the labour market is therefore decisive for safeguarding the basis of European integration.

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