Who is in and who is out? A risk based conceptualisation of insiders and outsiders

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Introduction

Since the 1970s, labour markets and family structures have undergone tremendous changes. With these transformations, employment patterns have changed. The standard post-war model of stable full-time employment – often lifelong for the same company – does not correspond to the employment biographies of most individuals anymore. There are two reasons for this, the first being unemployment, especially long-term unemployment, which has again become common in most Western societies (OECD 2006). Secondly, an ever-growing share of the workforce can be found in so-called atypical forms of employment. Part-time and temporary work has become widespread and accounts for most of job creation in the EU since the 1990s (Plougmann 2003, OECD 2006, 2010). Since welfare states were created in the industrial era to cover the 'average production worker', this deviation from previously standard employment patterns may result in specific risks of poverty and welfare losses, especially if welfare entitlement is closely linked to employment, as in the social insurance welfare states of Continental Europe (Palier 2010b).

As a consequence of this transformation of labour markets and its welfare implications, the links between weak or flexible labour market attachment, social and economic (dis-) advantages and political opinions have become an important topic on the research agendas in labour market sociology (Ranci 2010, Tomlinson and Walker 2012, Polavieja 2005, Burgoon and Dekker 2010) and political science, mostly in the context of the rapidly growing literature on dualisation, i.e. the divide between labour market insiders and outsiders (see e.g. Rueda 2005, 2006, 2007, Emmenegger 2009, 2010, Emmenegger et al.

2012, Lindvall and Rueda 2012, King and Rueda 2008, as well as Davidsson and Naczyk 2009 for an overview). We consider the literature on dualisation as an attempt to systematise and aggregate different forms of labour market vulnerability and flexibility in a way that allows exploring their political implications, both at the individual level of preferences and political behaviour, and at the macro-level of policy reforms. However, few contributions have actually invested theoretically and empirically in discussing and validating the conceptualisation and measurement of insiders and outsiders. Rather, most of them have referred to the conceptualisation and measurement previously used in micro-economics (e.g. Saint-Paul 1998, Lindbeck and Snower 2001), which is based on an individuals' current labour market status (fully employed vs. atypically or unemployed). We would like to argue, however, that political preferences and political behaviour are not only shaped by individuals' current situations but also by their expectations and perceptions concerning their (future) labour market risks. Such expectations depend strongly on the socio-structural environment of an individual, i.e. on the occurrence of labour market vulnerability in one's specific social group. Individuals in specific social and occupational groups are more or less likely to experience different forms of atypical employment (often alternating with spells of unemployment) throughout their employment biography. Many women, for example, work full time at a young age, withdraw from the labour market on account of childrearing and re-enter the labour market years later to take a part-time job. Hence, their employment trajectory clearly differs from the standard model of full time insider employment, but a snapshot of their employment status at a specific point in time would not reveal this. Since their entire (prospective or retrospective) employment trajectory is likely to affect their political

behaviour and views, we may want to evaluate their risk of being (and thinking like) an outsider on the basis of the social and occupational group they belong to, rather than on the basis of their short-term labour market situation.

Therefore, we would like to propose and explore a conceptualisation of insiders and outsiders based on their *risk of being atypically employed or unemployed.* We do this in both a *dichotomous* and a *continuous* variant.

The article is structured as following: We first theorise our measures and compare them to other definitions of insiders/outsiders. In a second step, we operationalise the risk of atypical employment and unemployment, and we propose a 'map of dualisation' that presents insiders and outsiders across regimes and countries, based on EU-SILC data from 2007 and additional household panel survey data for countries not included in EU-SILC. In a third step, we relate our measures to the key indicators of labour market advantage and disadvantage, income and upward job mobility prospects. In the last part of the article, we show that our measures predict differences in insider-outsider preferences for active and passive labour market policies as hypothesised in the literature.

Theory

Post-industrial foundations of dualised labour markets

Over the past 30 years, the economies of the advanced Western democracies have transitioned to a post-industrial social and economic structure. In the industrial era, the

industry and the growing public sector were able to provide stable, full time and well-insured jobs for virtually the entire male workforce. In the post-industrial era, however, unemployment rates and, especially, long-term unemployment rates have increased (OECD 2006) and most of job growth is due to atypical employment forms such as part-time employment and temporary or fixed term contracted work (Plougmann 2003). As a consequence, fewer labour market participants work in stable standard employment relations, which were so typical of the booming post-war decades. For instance, the number of workers on temporary contracts across the European Union has been growing by 15-20% *annually* since the 1980s – a figure, which represents about ten times the overall rate of employment growth (Standing 1993: 433, see also Esping-Andersen 1999b). Similarly, part-time employment accounts for close to 80 percent of the net job creation in the EU since the mid 1990s (Plougmann 2003). Of course, part of this flexibilisation can be seen as a response to increased demands for more flexible employment conditions. However, research shows that fixed-term contracts tend to imply economic disadvantages and cannot be considered reliable 'bridging' jobs into permanent employment (Booth et al. 2000, Kalleberg, Reskin and Hudson 2000, Booth et al. 2002, Gash 2008). Furthermore, even voluntary atypical work leads to lower social rights in the European social insurance welfare states. Hence, atypical work and unemployment can generally be interpreted as conditions of increased social and labour market vulnerability. This growing segmentation of the labour market in secure jobs and more 'vulnerable', unstable jobs is known as 'dualisation of the labour market' (Saint-Paul 2002, Rueda 2005, 2007, Palier and Thelen 2010). It is a trend that affects all advanced post-industrial economies, but which differs in its extent and social stratification regarding who is

affected. Atypical employment – denoting here all employment relations that deviate from standard and permanent employment – is, e.g., clearly gendered in many countries. Especially for women in Continental Europe, atypical employment is generally the norm rather than the exception (Esping-Andersen 1999a, 2009). Similarly, atypical employment is more widespread among younger labour market entrants in a range of Continental and Southern European countries (e.g. Chauvel 2009) than among the elderly workforce.

Conceptualising labour market vulnerability - defining insiders and outsiders at the micro-level

One may ask whether it makes sense to aggregate different forms of atypical employment and unemployment into specific groups, especially two groups of insiders and outsiders only. From a labour market sociology perspective, the answer is probably negative, but from a political science perspective, the aim is to identify broad socio-structural patterns of preferences and divides, which may be thought of as latent conflicts that may or may not be politicised and mobilised in terms of dualisation. Furthermore, the existing research shows that despite the heterogeneity of the groups of insiders and outsiders, this distinction is more than a mere academic notation, as it has political implications in terms of individual political preferences[1] (for preferences on job protection, see Rueda 2005,

[1] Not all insider-outsider divides in preferences are uncontroversial, though, and the most debated are certainly preferences regarding employment protection. Insiders benefit from strong employment protection, while outsiders are forced to stay out of the primary labour market or to work in 'dead-end' jobs (Lindbeck and Snower 2001: 167). Insiders also benefit from the fact that outsiders function as employment buffers in times of an economic downturn (Rueda 2005: 61). Consequently, insiders are supposed to strongly advocate employment protection, whereas outsiders are supposed to be less keen on employment protection for two reasons; first, it constitutes an entry barrier, and second, it increases the insiders' market power vis-à-vis their company (Saint-Paul 1998, 2002). Emmenegger (2009),

2007, Emmenegger 2009, on party preferences see Lindvall and Rueda 2012, on preferences for social policy see Burgoon and Dekker 2010, as well as Häusermann and Schwander 2009, 2011, and Häusermann and Walter 2010).

We would like to contribute to this literature by proposing a new conceptualisation of insiders and outsiders and two new measures of it, one dichotomous (similar to the existing one) and one continuous, which allows a more fine-grained measurement of individual labour market vulnerability. In most of the existing literature, insiders and outsiders are distinguished on the basis of their employment status at a particular point in time (i.e. the point when a particular survey is conducted). All respondents who are in stable employment are coded as insiders, while all 'unemployed, involuntary fixed-term employed and involuntary part-time employed' are coded as outsiders (Rueda 2007: 14-15, see also Lindbeck and Snower 2001, Saint-Paul 1998, 2002, Emmenegger 2009). The validity of conceptualisations obviously always depends on the specific research question one investigates. Hence, if one is interested in labour market processes (e.g. wage negotiations), the conceptualisation on the basis of employment status may indeed meet its analytical purpose. However, if we are interested in politics, i.e. policy preferences and mobilisation, we may need a conceptualisation that classifies insiders and outsiders on the basis of less ephemeral social and economic characteristics, which impact on the opportunities and constraints of individuals over a longer time span. This means that individuals might develop political preferences depending on their expectations about

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however, questions a direct relationship between outsider-status and preferences for job security. Outsiders may also favour strong employment protection, because of their hope of becoming an insider later in their career, for household relationships and labour solidarity (Emmenegger 2009: 134ff).

labour market risks, expectations that are strongly linked to the labour market prospects of their social group or 'milieu'.

A definition of insiders and outsiders based on risk comes with a number of advantages and disadvantages as compared to the more widespread measure based on labour market status. The disadvantage is that we attribute characteristics to an individual that are derived from its specific social group, i.e. we might attribute an individual a labour market risk that is never going to become manifest. This implies a number of empirical problems, especially for the dichotomous measure, which we address below when discussing the operationalisation. On the other hand, we see three possible interests in a risk-based measure: first, it is less vulnerable to the problem of volatility, i.e. the fact that labour market status may be too unstable to affect an individual's political preferences (see Emmenegger 2009 for a similar argument). Indeed, if people repeatedly move back and forth between standard and non-standard employment, i.e. if post-industrial societies are fluid and mobile, a categorisation of insiders and outsiders on the basis of their current labour market status may lead to problems of misclassification. Therefore, we argue in favour of a conceptualisation of labour market risk that is based on a more stable category, namely *occupational classes*. People may change from unemployment to employment within a few months, and they may even change jobs within the same time span, but they do not change their occupational class (i.e. the 'type' of job they are in) quickly (Goldthorpe et al. 1987, Mayer 2000). Of course, even occupational categories are not the perfect empirical basis for evaluating long-term employment trajectories. Ideally, we would rely on data tracing employment biographies over their work life. Such data, however, is not available on a comparative basis. We therefore rely on occupational

categories as a proxy for employment biographies. They measure permanent, structural disadvantages more reliably than a snapshot of labour market status. Think of women in Continental Europe who may be employed full time at young age, but who will experience periods of career interruption or atypical employment later on, a fact they are generally well aware of, meaning that the anticipation of future atypical employment will shape their attitudes and preferences. They do have a vulnerable labour market biography, irrespective of particular spells of full time employment. In sum, our argument is that people form identities and preferences *not* on the basis of a momentary labour market status, but with regard to their general, expected employment biography. We will argue below that post-industrial class theory holds the adequate conceptual tools to approximate these employment biographies.

A second advantage of a risk-based measure is that a conceptualisation based on current labour market status suggests the idea of two relatively homogeneous groups of insiders and outsiders. However, outsiders are a heterogeneous category. We find groups of people with 'typically atypical' work biographies both among high- and low-skilled, in different economic sectors, age groups etc. Consider these examples of typical outsiders: A woman working part-time in retail, a graphic designer working freelance on fixed-term projects, a recent university graduate who is being repeatedly employed on the basis of one-year contracts, or an unskilled unemployed worker. All of them are typical outsiders (in particular countries), but they are different in many aspects regarding their social risks and economic opportunities, which may be relevant depending on the research question. In a similar vein, Esping-Andersen (1999b), Kitschelt and Rehm (2006) and Häusermann

(2010) show that the ‘B-team’ of post-industrial societies is very heterogeneous, as the category of outsiders contains very different social groups. What these groups share – and what separates them from insiders – is a high risk of experiencing atypical employment during the course of their lives. A measure based on occupational profiles allows for differentiating between the heterogeneous group of outsiders and insiders in theoretically and empirically meaningful ways depending on particular research interests.

Nevertheless, and this third advantage is linked to our previous point, one may ask whether it makes sense to conceptualise insiders and outsiders in two groups at all, since these two groups will necessarily have a strong within-group heterogeneity. Such a dichotomy only makes sense theoretically, if the two groups share a certain degree of social closure, which may structure their political preferences. As a consequence, insiders and outsiders may be mobilised by political actors. Our approach to this is on one side empirical: if we find significant differences between insiders and outsiders in terms of labour market characteristics and political preferences *despite the heterogeneity of the two groups*, it means that the distinction of insiders and outsiders makes sense.
However, we consider the dichotomous measure generally as a weakness, because it entails a loss of information on different degrees of labour market vulnerability that is analytically problematic. Given that we measure outsiders based on risk rather than on status, we are able to develop a continuous measure of the *extent of labour market vulnerability*, which we may also call a *degree of outsiderness*.

Measuring the risk of atypical employment and unemployment

Following the above arguments, we define labour market outsiders as those individuals who incur a particularly high probability of being in atypical employment and/or unemployment. The question is how we can *measure* this risk. We propose to categorise individuals based on the characteristics of their occupational reference group, rather than on mere individual-level characteristics. The probability of experiencing unemployment or atypical employment obviously depends on the frequency – or rate of occurrence – within the relevant occupational category of an individual. We argue that class, gender and age form the relevant categories, which relate the individual to a social group sharing similar risks regarding atypical employment. Classes are socio-structural groups characterised by a particular situation in the production process (i.e. in the labour market), which shapes their resources, latent interests and preferences.[2] Class schemes are based on occupational profiles (Erikson and Goldthorpe 1993, Wright 1997, Oesch 2006), because people in similar professions tend to share permanent, structural commonalities, meaning that classes are characterised by a certain degree of 'social closure'. Post-industrial societies are still structured in different, relatively stable groups or classes, which share similar employment conditions. Class is therefore a meaningful starting point for the identification of group-specific risks of unemployment and atypical employment. We empirically rely on the class schema by Oesch (2006), which is explicitly developed to reflect post-industrial societies in two regards; a) it takes into account a heterogeneous middle class (Kriesi 1998), and b) it distinguishes between different types of low-skilled

[2] Oesch (2006) advocates a pragmatic use of the notoriously contested concept of class: 'class is simply referred to as a proxy for similarity in the position within the occupational system' (2006: 13). We share this definition that eludes the normative discussions and implications of the concept of class.

employees who can no longer be reasonably subsumed under a single category of (blue-collar or manual) workers (Oesch 2006: 98ff).

We follow Rehm and Kitschelt (2005), who argue that the Oesch class schema can be regrouped into five ‘class groups’. The location of the five class groups in the occupational structure is shown in Table 1: Capital accumulators are high-skilled managers, self-employed and experts. Socio-cultural professionals are high-skilled professionals in interpersonal professions, most of them in the public and private service sector. Lower skilled workers are differentiated into three groups; blue-collar workers are unskilled and skilled workers mostly in the industry, low service functionaries are unskilled and skilled employees in interpersonal services, and mixed service functionaries are routine and skilled workers in jobs with mostly organisational work logic. Table 1 presents the location of the five classes in the class schema.

Table 1: The post-industrial class schema

Independent work logic	Technical work logic	Organizational work logic	Interpersonal work logic	
Large employers, liberal professionals and petty bourgeoisie with employees *(e.g. entrepreneurs, lawyers)*	Technical experts *(e.g. executive engineers)*	Higher-grade and associate managers *(e.g. financial and managing executives)*	Socio-cultural (semi)-professionals *(e.g. teachers, health professionals)*	**Professional/ managerial**
Capital accumulators (CA)	**Capital accumulators (CA)**	**Capital accumulators (CA)**	**Socio-cultural professionals SCP**	
	Technicians *(e.g. engineers)*			**Associate professonal / managerial**
	Mixed service functionaries MSF			
Petty bourgeoisie without employees (*small shopkeepers)*	Skilled crafts and routine operatives *(e.g. machine operators, laborers in construction*)	Skilled and routine office workers *(e.g. office clerks)*	Skilled and unskilled service *(e.g. salespersons, waiters)*	**Generally / vocationally skilled**
Mixed service functionaries MSF	**Blue-collar workers BC**	**Mixed service functionaries MSF**	**Low service functionaries LSF**	**Unskilled**

Note: Based on Oesch (2006) and Kitschelt and Rehm (2005); adapted from Häusermann (2010). For the classification of occupations (ISCO-2d codes) see appendix 1.

We use these five classes as starting point. We also know that post-industrial labour market advantages are not only structured by class but also by gender and age. Much of the relevant literature points out that the insider-outsider divide is clearly gendered (Esping-Andersen 1999a: 308, 2009, Taylor-Gooby 1991, Kitschelt and Rehm 2006, Häusermann and Schwander 2009, Emmenegger 2010), and that research on dualisation must be linked to research on gender segregated labour markets (Davidsson and Naczyk 2009: 5). Other studies point to the fact that post-industrial labour markets also tend to hold different occupational prospects for younger and older workers, confronting younger workers with more volatile and instable labour markets, while older workers enjoy more

job protection (Esping-Andersen 1999b, Kitschelt and Rehm 2006, Chauvel 2009).[3] We therefore disaggregate the post-industrial classes further according to gender and age (except for capital accumulators, which are clearly the most privileged group in the labor market and therefore considered insiders by definition). The combination of 4 classes, 2 sexes and 2 age groups (below/above 40) leaves us with 17 occupational groups, which are the basis of our measurement of unemployment/atypical employment risk. We limit ourselves to only two age groups and draw the line at 40 for practical reasons and because most European countries have still a considerable part of young adults in education at the age of 30 (Couppié and Mansuy 2003). Considering that acquiring a firm position in the labour market requires another couple of years, a substantial share of people in their thirties must still be counted as labour market entrants.

Once established the 17 groups, we compare the group-specific rates of unemployment and atypical employment (combined) to the average rate in the workforce. Atypical employment includes involuntary part-time employment, fixed-term employment and helping family members.[4] These group- and workforce-specific rates can be calculated both for pooled sets of welfare regimes and for countries individually. Previous work on

[3] Another criterion that that is related to outsider-status in the dualisation literature is migration status (see Emmenegger and Careja 2012). We do not include migration because we are not interested in the migration status itself but in the risk of atypical employment. If migrants face a higher risk of atypical employment, this is reflected in rate of their socio-structural group.

[4] A related question refers to the quality of fixed-term jobs, for which we are unfortunately unable to distinguish between voluntary and involuntary forms of fixed-term employment because of data non-availability. Research on the permeability of temporary work has shown that the transition to permanent employment depends on various factors such as the sector of employment (Booth et al. 2000), or the composition of the temporary workforce (Gash 2008), but generally, fixed-term contracts are followed by other fixed-term contracts or unemployment for the vast majority of temporary employed (Booth et al. 2000: 10) and most temporary employed express a preference for a permanent contract (Kalleberg et al. 1997), i.e. they can be considered involuntarily fixed-term employed. Therefore, all fixed-term contracts are included in our measure of labour market vulnerability / outsiderness.

the insider-outsider divide across welfare regimes has shown that variation in the composition of insiders and outsiders exists both between welfare regimes and within regimes (Häusermann and Schwander 2009, 2012b). As this is an explorative article suggesting various operationalisations, we do both: the *welfare regime-specific* operationalisation implies that we pool our occupational groups across all countries belonging to a regime and compare rates of atypical employment to the regime-average, while the *country-specific* operationalisation implies that we do the same for each country individually.

For the *dichotomous measure of insiders and outsiders,* we select all groups that have a rate of atypical employment and unemployment that is significantly ($p < .05$) higher than the workforce average and we code all individuals in these groups as outsiders. For the *continuous measure of outsiderness*, we subtract the workforce average rate from the group-specific rate and use the difference as value of labour market vulnerability or 'degree of outsiderness' that we then attribute to all individuals in this specific group. In this article, we apply this operationalisation to EU-SILC data from 2007 (complemented by three national household panel surveys for countries missing in the EU-SILC)[5]. The level of detail of household panel data and the number of respondents (3500-8250 respondents for each country in the EU-SILC) is unrivalled by other comparative surveys. It thus allows a precise measurement across countries even for those groups, which are naturally small such as old female blue-collar workers, for example.

[5] For countries missing in the SILC data (Australia, Canada and USA) we supplement the information about the distribution of the risk for atypical employment with national household panels that provides us with the same amount of respondents and detailed information. For the USA we used the 'American Time Use Survey (ATUS)', for Canada the' Survey of Labour and Income Dynamics (SLID)' and for Australia 'The Household, Income and Labour Dynamics in Australia (HILDA)'.

The high number of respondents is also crucial, since we rely on labour market conditions that may affect small portions of the electorate only (unemployment, temporary employment, etc.).

Table 2 presents descriptive information on the distribution of individuals in the different categories and their group-specific deviation in percentage points from the workforce average rate of unemployment and atypical employment (which corresponds to their 'degree of outsiderness'). We have highlighted all groups whose group-specific average significantly exceeds the workforce average ('outsiders'). We show only the regime-specific operationalisation in this table for reasons of space. Table 3 is based on Table 2, showing the share of outsiders among different groups of the workforce, as well as the mean of labour market vulnerability – i.e. outsiderness – of these groups.

Table 2: Map of dualisation: difference between the group-specific rate of atypical employment / unemployment and the rate among the entire workforce

	Liberal regime			**Nordic regime**			**Continental regime**			**Southern regime**		
	(Australia, Canada, Britain, Ireland, USA)	N	Atypical work/ Unempl.	(Denmark, Finland, Norway, Sweden)	N	Atypical work/ Unempl.	(Austria, Belgium, France, Germany, Netherlands, Switzerland)	N	Atypical work/ Unempl.	(Greek, Italy, Portugal, Spain)	N	Atypical work/ Unempl.
Outsiders	LSF young women	5,019	36.5	LSF young women	2,267	30.1	LSF young women	3,177	30.9	LSF young women	3,789	26.4
Insiders	LSF young men	3,370	19.3	LSF young men	962	13.7	LSF young men	1,439	-5.2	LSF young men	2,014	3.7
	LSF old women	4,035	18.8	LSF old women	3,039	16.3	LSF old women	3,974	33.9	LSF old women	3,939	22.6
	LSF old men	2,389	-8.0	LSF old men	847	-4.3	LSF old men	1,568	-14.0	LSF old men	1,867	-17.1
	SCP young women	5,342	6.9	SCP young women	2,390	9.4	SCP young women	4,418	17.5	SCP young women	2,842	8.1
	SCP young men	2,287	-5.1	SCP young men	1,285	-5.0	SCP young men	2,367	-14.0	SCP young men	1,606	-8.4
	SCP old women	5,291	0.0	SCP old women	4,128	2.1	SCP old women	5,384	17.5	SCP old women	2,898	-13.6
	SCP old men	2,856	-14.0	SCP old men	2,395	-9.8	SCP old men	3,940	-21.1	SCP old men	2,533	-27.3
	BC young women	1,074	12.2	BC young women	557	9.8	BC young women	869	16.9	BC young women	1,648	20.5
	BC young men	7,282	-2.4	BC young men	3,291	-7.6	BC young men	4,950	-12.6	BC young men	6,446	-2.1
	BC old women	1,466	4.6	BC old women	1,005	2.9	BC old women	1,222	22.2	BC old women	2,602	33.2
	BC old men	7,676	-9.9	BC old men	4,637	-9.6	BC old men	5,720	-17.9	BC old men	7,124	-8.4
	MSF young women	4,491	10.1	MSF young women	770	15.2	MSF young women	2,792	15.8	MSF young women	2,144	10.2
	MSF young men	2,644	1.5	MSF young men	741	-6.3	MSF young men	2,187	-17.7	MSF young men	1,646	-7.8
	MSF old women	4,782	-0.5	MSF old women	1,546	6.5	MSF old women	3,323	20.3	MSF old women	1,588	-4.1
	MSF old men	2,335	-15.1	MSF old men	1,058	-10.7	MSF old men	2,665	-23.8	MSF old men	1,750	-25.6
	CA	16,903	-18.6	CA	5,693	-13.6	CA	8,764	-21.1	CA	5,004	-23.2
	Total	*77,164*		Total	*36,319*		Total	*57,256*		Total	*50,636*	
	Entire workforce		*29.8*	*Entire workforce*		20.3	*Entire workforce*		38.6	*Entire workforce*		36.3
	Minimum		*-18.6*	*Minimum*		-13.6	*Minimum*		-23.8	*Minimum*		-27.3
	Maximum		*36.5*	*Maximum*		30.1	*Maximum*		33.9	*Maximum*		33.2

Note: Values are the difference between the group-specific rate of atypical employment / unemployment and the rate among the entire workforce (outsiderness). Highlighted are those groups with significantly higher rates than the workforce average (outsiders); based on EU-SILC 2007, data for Australia, Canada and USA is based on country-specific national household panels from 2007. Abbbreviations: LSF are low service functionaries; SCP are socio-cultural professionals, BC are blue-collar workers, MSF are mixed service functionaries and CA are capital accumulators (see Table 1). Young means < 40; old means > 40

Table 3: Labour market vulnerability in different groups of the workforce

	Liberal regime		**Nordic regime**		**Continental Regime**		**Southern regime**	
	% of outsiders	Mean of outsiderness	% of outsiders	Mean of outsiderness	% of outsiders	Mean of outsiderness	% of outsiders	Mean of outsiderness
... among total workforce	34.5	1.4	32.6	-1.8	47.0	1.5	38.0	0.4
... among women	59.5	8.4	62.0	7.6	94.3	21.4	73.9	14.3
... among young	54.8	6.6	51.6	3.1	48.0	2.7	53.8	5.2
... among low-skilled individuals	40.1	3.2	37.1	-0.6	50.6	3.8	39.0	1.9
... among high-skilled individuals	31.0	-1.6	24.3	-1.9	43.0	-2.7	34.8	-4.5

Note:'% of outsiders' means the percentage of individuals which belong to a social group with a rate of unemployment and atypical employment that is significantly higher than the workforce average. 'Mean of outsiderness' denotes the average deviation (in percentage points) of the group-specific rates from the average workforce rates (see Table 2). Numbers are based on the regime-specific operationalisations and based on EU-SILC 2007, data for Australia, Canada and USA is based on country-specific national household panels.

Two main insights result from Tables 2 and 3. Firstly, even though there are variations in the composition of insiders and outsiders across regimes, female and young labour market participants experience atypical employment and unemployment more strongly than men and elderly employees in all regimes. In all four regimes, young female low service functionaries are most strongly affected by these forms of labour market vulnerability than any other group. Their rate of atypical employment and unemployment exceeds the regime-specific average rate by 25.2 to 34.2 percentage points. By contrast, high-skilled elder men and capital accumulators experience the lowest risk of atypical employment and unemployment. The clear gender bias is particularly strong in the Continental regime: 94.3 percent of women are outsiders when using the dichotomous measure and their mean value of outsiderness lies by more than 20 percentage points above the mean of the workforce. This is more than in the other three regimes, where women's outsiderness exceeds the average by 7.6 to 14.3 percentage points. Young labour market participants are particularly strongly affected in the Liberal and Southern regimes, where more than half of the young belong to social groups disproportionally affected by atypical

employment and unemployment. Despite, the mean of outsiderness among the young is higher than the mean of the entire workforce in all regimes.

The second insight resulting from Table 2 and Table 3 is that both insiders and outsiders are heterogeneous in terms of skills and education level. The high-skilled are not shielded from atypical employment. Between 24.3 (in the Nordic regime) and 43 percent (in the Continental regime) of high-skilled belong to groups experiencing rates of unemployment and atypical employment that lie significantly above the workforce average. Many high-skilled women, for example, work in part-time jobs and many graduates find their way into the labour market through fixed-term contracts only. Even though it may make sense – depending on the research question – to analyse low- and high-skilled labour market vulnerability separately, it is important to notice that atypical work in particular has spread widely into the higher skilled classes, with all the social and political correlates in terms of poor social security coverage and weak political mobilisation that this implies (for a discussion of the issue of highly skilled outsiders, see also Polavieja 2005, Davidsson and Nacyk 2009).

However, it is true that 'high-skilled outsiderness' is particularly a matter of involuntary part-time employment and fixed-term contracts, rather than being driven by unemployment. To illustrate this more clearly, and to differentiate these forms of labour market vulnerability, we calculated the rates of unemployment and the rates of involuntary part-time and temporary work separately. The resulting tables are shown in appendix 2.1 and 2.2. Not unexpectedly, the risk of unemployment turns out to be more strongly skill-biased than the risk of atypical employment: If we were to define outsiders

solely on the basis of unemployment, they would almost exclusively be found among the low service functionaries and blue-collar workers. Nevertheless, age and gender remain relevant in structuring the risk for unemployment. In all regimes, blue-collar workers, as well as female and young male low service functionaries have particularly high rates of unemployment. In contrast to unemployment, atypical employment is generally more gender- and less skill-related, as both high and low-skilled women massively tend to work in involuntary part-time or in temporary work.

Due to space restrictions we cannot present a table with the specific classification of insiders and outsiders for each country in this article.[6] In general, the regime-specific and the country-specific operationalisations provide very similar results ($r = 0.86$ for the dichotomous measure, $r = 0.94$ for the continuous measure when correlating them at the individual level), but intra-regime variance is stronger in some cases than in others. The Liberal regime is quite homogeneous. The pattern in Australia, Ireland, the US and Britain corresponds to the pattern of the pooled analysis where skills and gender are important in structuring the risk for atypical employment and unemployment. In Canada, the risk for being an outsider is somewhat less gendered than generally in the Liberal regime and more structured by age (contrary to the pooled analysis, young blue-collars and socio-cultural professionals are disproportionally affected by atypical employment and unemployment).

Turning to the Nordic regime, we find that in Sweden and Denmark, there are generally fewer workers affected by a disproportionate risk for atypical employment[7] and

[6] Country-specific tables are available from the authors.

[7] For Denmark, this may be related to missing information about temporary work.

unemployment than in Norway and Finland. In Finland, the risk of being an outsider is stronger age-biased than in the pooled analysis, but in all countries, capital accumulators clearly face the lowest rate of outsiderness.

In the Continental regime, the country-specific patterns of outsiders and outsiderness are very consistent with the pooled regime-analysis. In all Continental countries, gender is an extremely strong predictor of atypical work and unemployment. Only France deviates: here, skill level and age are equally important in structuring labour market vulnerability. As a result, and contrary to the other countries, French young male low service functionaries are counted as outsiders, whereas elder female socio-cultural professionals are not. Overall, the French pattern is more similar to the Southern regime than to the other Continental countries.

Finally, the countries of the Southern regime form the most homogeneous pattern. Generally, young women and elderly low-skilled women are counted as outsiders in all countries. Age plays an important role too: in Spain and Italy, low-skilled young men too experience slightly higher labour market vulnerability than the national average (this refers to blue-collar workers in Spain and low service functionaries in Italy). Overall, it is noteworthy that the range of outsiderness between the minimum value of -27.3 (old male socio-cultural professionals) and the maximum value of 33.2 (old female blue-collar workers) is highest in the Southern regime, indicating strong inequality in terms of labour market vulnerability.

Assessing the validity of the risk-based conceptualisation of insiders and outsiders

To further assess our risk-based conceptualisation of insiders and outsiders, we discuss both the criterion and construct validity of our conceptualisation (see Oesch 2006: 94f, Evans 1992). The *criterion validity* assesses whether a concept measures what it is indented to measure. It depends on measuring outcomes or characteristics that are directly linked to the concept one wants to validate (Evans 1992: 212). For the risk-based conceptualisation of insiders and outsiders this implies that we assess whether the conceptualisation is indeed related to actual differences in labour market (dis)advantages. *Construct validity*, on the other hand, is assessed by testing if a concept predicts other, more distant variables in a theoretically meaningful way (Evans 1992: 212). The literature on dualisation postulates different policy preferences of insiders and outsiders due to their different positions in the labour market (Rueda 2005, Emmenegger 2009). Consequently, we will test whether the risk-based conceptualisation is able to predict differences in such labour market policies preferences.

Analysis of labour market advantages

In this section, we first assess criterion validity by discussing two key indicators of labour market advantages: work income and upward mobility (see also Oesch 2006). We expect outsiders to fare worse on both indicators of labour market advantages. Data wise, we rely on the ISSP Work Orientation III survey (2005), which includes 15 countries.[8] We use the four insider/outsider measures developed in this article: the dichotomous and continuous

[8] Australia, Canada, Denmark, Finland, France, Germany, Great Britain, Ireland, Norway, Portugal, Spain, Sweden, Switzerland and the United States.

measures based on the regime-specific rates of atypical employment and unemployment – *outsider/outsiderness (regime)* – as well as both measures based on country-specific rates of atypical employment and unemployment– *outsider/outsiderness (country).* To control for country-specific differences, we include country dummies in all models and use clustered standard errors. For both dependent variables we specify four models: the first model shows the estimate for the regime-specific, dichotomous measure. Model 2 refers to the country-specific, dichotomous measure. Model 3 uses the regime-specific, continuous measure and model 4 shows the estimate for the country-specific, continuous measure. All models control for age, gender, education, union membership, church attendance, if an individual lives in a couple household and (for the upward mobility) income, following the literature in this field (Emmenegger 2009, Burgoon and Dekker 2010). Details regarding the operationalisation are documented in appendix 3.

Table 4: Determinants of labour market advantages: Income and promotion chances

	Income				Chances for promotion in current job			
	M1	M2	M3	M4	M1	M2	M3	M4
Outsider (Regime)	-0.277**				-0.372***			
	(0.093)				(0.079)			
Outsider (Country)		-0.242**				-0.184*		
		(0.088)				(0.095)		
Outsiderness (Regime)			-0.013***				-0.016***	
			(0.004)				(0.004)	
Outsiderness (Country)				-0.011**				-0.011***
				(0.005)				(0.004)
Female	-0.226**	-0.247***	-0.169*	-0.152*	0.015	-0.091	0.050	-0.017
	(0.087)	(0.080)	(0.091)	(0.074)	(0.059)	(0.078)	(0.077)	(0.092)
Age	0.004**	0.005***	-0.001	-0.000	-0.035***	-0.032***	-0.034***	-0.032***
	(0.001)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)
Education	0.292***	0.298***	0.279***	0.230**	0.262***	0.281***	0.255***	0.273***
	(0.090)	(0.092)	(0.083)	(0.086)	(0.060)	(0.067)	(0.061)	(0.055)
Union membership	-0.120	-0.113	-0.027	0.124	-0.050	-0.042	-0.067	-0.070
	(0.119)	(0.123)	(0.122)	(0.075)	(0.075)	(0.073)	(0.077)	(0.076)
Church attendance	-0.016**	-0.016**	-0.019**	-0.012	0.024*	0.024*	0.026*	0.027*
	(0.007)	(0.007)	(0.008)	(0.007)	(0.014)	(0.014)	(0.015)	(0.015)
Living in a couple household	0.163***	0.158***	0.141***	0.126**	0.042	0.034	0.053	0.054
	(0.048)	(0.047)	(0.043)	(0.048)	(0.061)	(0.060)	(0.060)	(0.059)
Income					0.260***	0.266***	0.232***	0.240***
					(0.015)	(0.014)	(0.012)	(0.013)
Country fixed effects	yes	yes	yes	yes	yes	yes	yes	yes
Pseudo R^2	0.740	0.740	0.742	0.782	0.035	0.033	0.035	0.034
N	8577	8577	10010	9149	6983	6983	6505	6505

*Notes: Values in parentheses are standard errors; OLS regression for income; ordered logistic regression for promotion chances; regressions with clustered standard errors and country dummies ;data is weighted country dummies and cut-points not shown due to space restriction; Pseudo R^2 is the McKley and Zavoina R^2; * = significant at the 0.1 level, ** = significant at the 0.05 level, *** = significant at the 0.01 level; Data source: ISSP Work Orientations III (2005).*

The effect of outsiderness on income is clear-cut and as expected: Being an outsider has a consistent, strong and negative effect on income regardless of the measure we use. The negative effect of being an outsider (net of all control variables such as gender, age, education etc.) lowers the respondent's income by 277 Euros when we use the regime-specific, dichotomous operationalisation, and by 244 Euros using the country-specific, dichotomous operationalisation. Regarding the effects of the continuous measures, we calculate substantive effects by comparing the estimated income of an individual with the maximum outsiderness value to an individual with the minimum outsiderness value holding all other variables constant: this difference is 850 Euros for the regime-specific operationalisation and 880 Euros for the country-specific operationalisation.
The control variables show no surprising effects: Gender and church attendance are negatively related to income, while age, high education and living in a couple household have a positive association with income. Union membership does not affect income significantly.

The disadvantaged position of outsiders in the labour market also shows in the subjective assessment of upward mobility. Outsiders are consistently and significantly less likely than insiders to agree to the statement that chances for advancement in their current job are high. In order to discuss the effects substantively, we compare predicted probabilities of agreeing to that statement for insiders and outsiders. We calculate predicted probabilities for an individual with average income and age, holding all other variables at zero, i.e. a 42-years old, not religious, low-skilled male outsider, who lives alone, is not a union member, earns 1878 Euros and lives in France. Compared to an insider, his probability of saying that he definitely expects to be promoted is 9.1 percentage points

lower (regime-based, dichotomous operationalisation). The difference is 4.3 percentage points when we use the country-specific, dichotomous measure. To estimate the substantive effects of the continuous measure, we compare the probabilities of the same individual, attributing him the highest and the lowest value of outsiderness (26.4 and -16.5 in France): the net effect of outsiderness amounts to 15.6 percentage points. If we use the regime-specific measure, an individual with the highest value (31.9) has a likelihood of 15.7 percent to say that he expects definitively to be promoted, while the likelihood for the same individual with the lowest labour market vulnerability (-18.5) is 33.6 percent. This is a difference of 17.9 percentage points. Hence, being an outsider and labour market vulnerability more generally have substantial net effects on subjective promotion prospects, which are independent from other determinants such as age, gender and education.

Turning to the control variables, we see that high-skilled employees and high income earners are more optimistic about their career advancement prospects while elder employees assess their career chances less optimistically. The other control variables do not display significant effects, with the exception of church attendance being slightly positively related with the subjective assessment of upward mobility.[9]

We conclude from this section that the risk-based measure of outsiders is valid, insofar as we find significant differences in labour market advantages between insiders and outsiders. This holds even for the dichotomous measures, despite the heterogeneity of

[9] We tested whether the results hold only in high unemployment countries because fixed-term employment is thought to be more problematic in these countries. Similarly, unemployment is more persistent in countries of high unemployment. However, for neither of the two indicators of labour market disadvantage do we find stronger effects in high unemployment countries (results available from the authors). See also footnote 13.

these two groups. Literature on social closure of post-industrial classes (Oesch 2006) and reproduction of poverty spells over generations (Tomlinson and Walker 2012) shows that these differences are persistent over time. Such a longitudinal analysis, however, lies beyond the scope of this article.

Analysis of preferences for labour market policies

We now move to the discussion of the construct validity. The literature on dualisation suggests that insiders and outsiders hold different preferences regarding labour market policies. We replicate these analyses of the existing insider-outsider literature using our measures. For this part of the analysis, we rely on ISSP Role of Government IV 2006 survey data, which includes the same 15 countries as before plus the Netherlands. To predict labour market policy preferences of insiders and outsiders we use ordered logit regressions. Our main focus in this analysis is on the direction and consistency of effects, rather than the magnitude and substantive differences, which are notoriously small in all micro-level analyses (see Rueda 2005, Emmenegger 2009).

The existing literature (most clearly so Rueda 2005, and Emmenegger 2009) has evidenced insider-outsider preferences with regard to active labour market policies. As an indicator of preferences for *active* labour market policies (ALMP), we use a question asking respondents whether they agree that the government is responsible for providing a job for everyone who wants one. We operationalise preferences for *passive* labour market

policies (PLMP) with a question asking if the respondent agrees that the government should spend more on unemployment benefits.[10]

Table 5 shows the estimates of preferences for active and passive labour market policies. For each dependent variable, models 1-4 test the influence of labour market vulnerability with regard to the four different risk-based measures of outsider and outsiderness. The models include the same set of control variables as before.

[10] Both Emmenegger (2009) and Rueda (2005) refrain from operationalising preferences for passive labour market policies. Emmenegger focuses on preferences for job security. Rueda argues theoretically that outsiders favour passive labour market policies more strongly than insiders but the data he uses (Eurobarometer 94) does not allow to operationalise preferences for passive labour market policies (Rueda 2005: 65).

Table 5: Determinants of labour market preferences

	Active labour market policies				Passive labour market policies			
	Government should provide a job for everyone				*Government should spend more on unemployment benefits*			
	M1	M2	M3	M4	M1	M2	M3	M4
Outsider (Country)	0.014				0.077			
	(0.073)				(0.087)			
Outsider (Regime)		0.208***				0.213**		
		(0.073)				(0.107)		
Outsiderness (Country)			0.004*				0.006*	
			(0.002)				(0.003)	
Outsiderness (Regime)				0.009***				0.010***
				(0.002)				(0.003)
Female	0.152**	0.006	0.071	-0.021	0.027	-0.088	-0.052	-0.123
	(0.060)	(0.076)	(0.070)	(0.058)	(0.101)	(0.097)	(0.110)	(0.105)
Age	-0.003	-0.002	-0.002	-0.000	0.022***	0.022***	0.023***	0.024***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Income	-0.258***	-0.252***	-0.251***	-0.242***	-0.214***	-0.209***	-0.205***	-0.198***
	(0.031)	(0.031)	(0.032)	(0.030)	(0.037)	(0.038)	(0.038)	(0.038)
Education	-0.508***	-0.494***	-0.490***	-0.470***	-0.191*	-0.179*	-0.170*	-0.153
	(0.065)	(0.064)	(0.066)	(0.064)	(0.099)	(0.098)	(0.100)	(0.104)
Union membership	0.280***	0.278***	0.280***	0.277***	0.367***	0.366***	0.368***	0.365***
	(0.070)	(0.069)	(0.070)	(0.070)	(0.107)	(0.108)	(0.107)	(0.107)
Church attendance	0.013	0.012	0.012	0.012	-0.019	-0.019	-0.019	-0.019
	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
Living in couple	-0.114***	-0.113***	-0.113***	-0.110***	-0.234***	-0.234***	-0.233***	-0.232***
household	(0.033)	(0.032)	(0.033)	(0.033)	(0.059)	(0.059)	(0.059)	(0.059)
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R^2	0.059	0.059	0.059	0.060	0.077	0.077	0.077	0.078
N	8401	8401	8401	8401	8453	8453	8453	8453

*Notes: Values in parentheses are standard errors, ordered logistic regression with clustered standard errors and country dummies; data is weighted; country dummies and cut-points not shown due to space restriction; Pseudo R^2 is the McKley and Zavoina R^2; * = significant at the 0.1 level, ** = significant at the 0.05 level, *** = significant at the 0.01 level; Data source: ISSP RoG IV 2006. For details on operationalisation, see appendix 3*

We start by discussing the estimates for active labour market policy preferences. Models 2-4 show that outsiders clearly and significantly want more public job creation than insiders – which is in line with the expectations in the literature. The effect of the country-specific outsider dummy variable goes in the right direction, but does not reach significance. This might be due to the fact that the comparison with country-specific averages (the overall variance being lower than in the regime-comparison) leads to a dichotomous measure with too heterogeneous groups, an observation that adds value to the continuous measure. In terms of substantive effects, we calculate probabilities for the same individual as specified before:[11] being an insider lowers his probability of agreeing that the government is (definitely or probably) responsible for providing a job for everyone by about 6 percentage points when we use the regime-specific, dichotomous operationalisation. Using the country-specific continuous measure, going from the highest to the lowest value of outsiderness has a net effect of about 15 percentage points (from 78.5 to 63.4 percent) on the likelihood that a respondent agrees that the government should provide a job for everyone. The same effect is even 18.4 percentage points when using the regime-specific continuous measure. Turning to the control variables, income, education and if a person lives in a couple household influence preferences for active labour market policies negatively, while union members are more likely to be in favour of active labour market policies than non-union members. The frequency of church attendance exerts no influence on the preferences for active labour market policies and gender has no consistent effect either.

For passive labour market policy preferences we find very similar results. As expected, outsiders have stronger preferences for passive labour market policies, i.e. they are more likely to agree more to the statement that the government should spend more on

[11] The average individual is a 43-years old (mean), non religious man who lives alone, is not a union member, earns 2'147 Euros (mean) and lives in France.

unemployment benefits. Again, the coefficient for the country-specific dummy variable does not reach significance, but the effect goes in the expected direction. In terms of substantive effects, the net difference between insiders and outsiders is 4.2 percentage points for the regime-specific, dichotomous measure.[12] Regarding the continuous measure of outsiderness, we find that net of all other determinants, an individual with the highest value of labour market vulnerability is about 13.1 (regime-specific measure) or 14.4 (country-specific measure) percentage points more likely to favour more generous unemployment benefits than an individual with the lowest score of labour market vulnerability. The effects of the control variables are similar to the effects we found for active labour market policy preferences. Income, education and living in a couple household have a significant negative influence on passive labour market policy preferences, while union members and elder employees are more likely to be in favour of passive labour market policies than non-members and younger individuals. Religiosity, again, exerts no influence on preferences.[13]

Overall, we find evidence for the construct validity of our risk-based measures of outsiders and outsiderness with regard to preferences for active and passive labour market policies: outsiders are consistently more likely to agree that government should provide a job for everyone, and that the government should spend more on unemployment benefits. Overall, we argue that the empirical analysis supports the new measure that we have theoretically and empirically developed in this article. Indeed, preferences for active labour market policy are the core measure on which insiders and outsiders are expected to differ. For this

[12] As the country-specific, dichotomous measure was not significant in Table 5, we refrain from calculating predicted probabilities for this measure.

[13] We again tested whether the results hold only in countries with high rates of unemployment. The effects, however, are generally consistent in countries with high and low unemployment rates. Only for one measure (regime-specific, dichotomous operationalisation), we have stronger results in countries with high unemployment (results available from the authors). Given the overall robustness of results independent of the country-specific unemployment rate, we refrain from analysing this contextual effect further.

variable, we clearly find evidence for the risk-based measures. When it comes to passive labour market policies, expectations in the literature are somewhat less clear, since income-related passive transfers benefit insiders too, given that insiders are likely to have much better contribution-records. However, insiders are also – by definition and by measurement – less likely to become unemployed at all, so that we still expect outsiders to be more favourable towards generous unemployment benefits, a hypothesis that is confirmed by the data.

Conclusion

This article proposes a new conceptualisation and measurement of labour market insiders and outsiders, and of labour market vulnerability more generally. We have argued that if we want to explain political preferences of insiders and outsiders, it may be useful to operationalise insider and outsiders on the basis of stable social and economic characteristics, which are likely to shape their (current and future) life chances and constraints. We suggest a conceptualisation of insiders and outsiders that is based on the risk of individuals to find themselves in atypical employment or unemployment, this risk being measured by specific rates of unemployment/atypical employment of the social group they belong to. On this basis, we propose both a dichotomous operationalisation of insiders/outsiders and a continuous measure of 'outsiderness', or more generally labour market vulnerability. The dichotomous measure codes individuals as outsiders if they belong to a social group whose rate of unemployment and atypical employment is significantly higher than the workforce average, all other individuals are coded as insiders. The continuous measure departs from the dichotomous view of insiders and outsiders that prevails in the literature on insider-outsider divides, but it allows a more fine-grained

measurement of labour market vulnerability by attributing each individual the difference between his/her group-specific rate of unemployment and atypical employment and the average rate in the workforce as value of outsiderness. With these measures, we developed a map of dualisation across the four welfare regimes and the individual countries, which shows that, overall, low-skilled service sector employees, women and young labour market participants tend to be most strongly affected by labour market vulnerability, with a few regime- and country-specific differences.

We also assessed the criterion and construct validity of our conceptualisation: outsiderness (as measured in terms of the risk of unemployment/atypical employment) clearly contributes to a disadvantage in terms of income and job mobility, net of other factors such as gender, age or education. We also showed that our measures predict active and passive labour market policy preferences of insiders and outsiders as expected in the literature of dualisation. Based on these findings, we argue that the definition of outsiders and outsiderness as developed in this article is empirically and theoretically relevant for the research on dualisation, and that it might be of interest to other studies in this area. However, we are also aware that our measures are more complex and require more fine-grained data (especially in terms of occupational classes) than the standard operationalisation, which simply codes outsiders based on their current labour market status. Hence, one may ask whether it is worthwhile choosing the more complex path. We would argue that it is, given its added theoretical value with regard to specific research questions (notably if we are interested in analysing not the immediate labour market disadvantages of outsiders, but the political consequences of dualisation) and its added degree of differentiation regarding the continuous measure of outsiderness and labour market vulnerability. Additionally, the map of dualisation we presented in Table 2 can be

used very conveniently in subsequent analyses, and country-specific values are available from the authors.

More generally, we think that this article bears insights for the literature on dualisation and insider-outsider divides irrespective of the precise measurement we use. The distinction between a core workforce of insiders, which is fully integrated in the labour market, and a more marginal and vulnerable the outsiders is empirically validated, and we were able to identify a pattern of socio-structural groups of insiders and outsider who – despite the heterogeneity of these two groups – face distinct labour market disadvantages and hold distinct preferences. We also think that our continuous measure of outsiderness allows linking the more political science oriented dualisation literature with the more sociological literature on labour market vulnerability. Finally, we were able to show cross-country and cross-regime differences in the degree and structure of labour markets vulnerabilities and dualisation. This raises many questions for future research: where and to what extent will an insider-outsider divide be mobilised politically? Do the political preferences of insiders and outsiders differ only regarding labour market policies, or do they hold different preferences regarding the welfare state in general? Moreover, to what extent does labour market vulnerability affect vote choices and electoral preferences for political parties? These are questions that current research on dualisation and insider-outsider divides needs to address, in order to spell out the social and political consequences of changing labour markets.

Appendix

Appendix 1 – Classification of occupations in post-industrial class groups

Classification of occupations in post-industrial class groups, based on Oesch 2006 and Kitschelt and Rehm 2005: 23

Independent work logic	**Technical work logic**	**Organizational work logic**	**Interpersonal work logic**	
Large employers, self-employed professionals and petty bourgeoisie with employees (Capital accumulators) *self-employed and ISCO88-2d <=24*	Technical experts (Capital accumulators) *ISCO88-2d 21*	Higher-grade managers (Capital accumulators) I*SCO88-2d 11, 12*	Socio-cultural semi-professionals (Socio-cultural professionals) *ISCO88-2d 22-24, 32-34*	**Professional/ managerial**
	Technicians (Mixed service functionaries) ISCO88-2d 31	Associate managers (Capital accumulators) *ISCO88-2d 13*		**Associate professional / managerial**
Petty bourgeoisie without employees (Mixed service functionaries) *self-employed and ISCO88-2d >24*	Skilled crafts (Blue-collar workers) *ISCO88-2d 71-74*	Skilled office workers and routine office workers (Mixed service functionaries) *ISCO88-2d 41, 42*	Skilled service and routine service (Low service functionaries) *ISCO88-2d 51, 52, 91*	**Generally / vocationally skilled**
	Routine operatives and routine agriculture (Blue-collar workers) *ISCO88-2d 61, 92, 81-83, 93*			**Low/ un-skilled**

Appendix 2.1 – Difference (in percentage points) between the group-specific rate of atypical employment or unemployment and the rate among the entire workforce

Liberal regime (AU, CA, IE, UK, US)	N	Unemp	Part-time & temp	Nordic regime (DK, FI, NO, SE)	N	Unemp	Part-time & temp	Continental regime (AT, BE, CH, FR, GE, NL)	N	Unemp	Part-time & temp	Southern regime (ES, GR, IT, PT)	N	Unemp	Part-time & temp
LSF young women	5,019	8.0	35.6	LSF young women	2,267	1.9	32.7	LSF young women	3,177	4.8	28.9	LSF young women	3,789	10.7	23.3
LSF young men	3,370	8.6	15.2	LSF young men	962	1.3	12.7	LSF young men	1,439	2.8	-6.4	LSF young men	2,014	3.8	2.0
LSF old women	4,035	-0.3	16.7	LSF old women	3,039	0.6	18.0	LSF old women	3,974	1.9	24.4	LSF old women	3,939	0.9	21.5
LSF old men	2,389	-0.9	-8.8	LSF old men	847	0.9	-9.0	LSF old men	1,568	1.8	-18.8	LSF old men	1,867	-1.8	-19.6
SCP young women	5,342	-1.3	8.4	SCP young women	2,390	-0.5	9.0	SCP young women	4,418	-1.4	20.3	SCP young women	2,842	0.6	7.7
SCP young men	2,287	-1.6	-3.9	SCP young men	1,285	-0.7	-9.8	SCP young men	2,367	-1.6	-10.4	SCP young men	1,606	-0.1	-6.3
SCP old women	5,291	-4.9	2.7	SCP old women	4,128	-0.9	3.1	SCP old women	5,384	-1.6	15.6	SCP old women	2,898	-3.5	-15.5
SCP old men	2,856	-5.5	-9.7	SCP old men	2,395	-0.9	-15.2	SCP old men	3,940	-2.4	-18.4	SCP old men	2,533	-4.6	-27.2
BC young women	1,074	8.8	5.9	BC young women	557	0.9	14.7	BC young women	869	6.9	15.8	BC young women	1,648	14.7	15.3
BC young men	7,282	5.8	-7.5	BC young men	3,291	0.6	-13.5	BC young men	4,950	1.1	-13.3	BC young men	6,446	2.5	-2.9
BC old women	1,466	1.3	4.0	BC old women	1,005	1.3	12.7	BC old women	1,222	2.7	13.2	BC old women	2,602	-0.5	35.5
BC old men	7,676	0.6	-11.1	BC old men	4,637	0.4	-14.3	BC old men	5,720	0.7	-23.2	BC old men	7,124	-1.8	-5.9
MSF young women	4,491	1.9	9.2	MSF young women	770	0.0	14.0	MSF young women	2,792	1.0	14.6	MSF young women	2,144	2.0	5.8
MSF young men	2,644	3.4	-0.6	MSF young men	741	-0.2	-14.6	MSF young men	2,187	-1.1	-19.0	MSF young men	1,646	0.9	-11.6
MSF old women	4,782	-2.7	-0.3	MSF old women	1,546	0.2	5.8	MSF old women	3,323	0.5	11.7	MSF old women	1,588	-1.7	-9.8
MSF old men	2,335	-2.8	-13.8	MSF old men	1,058	0.0	-20.9	MSF old men	2,665	-1.6	-27.0	MSF old men	1,750	-3.3	-29.7
CA	16,903	-4.7	-16.0	CA	5,693	-1.2	-21.4	CA	8,764	-2.2	-19.2	CA	5,004	-3.1	-13.6
Total	*77,164*			*Total*	*36,319*			*Total*	*57,256*			*Total*	*50,636*		
Entire workforce		7.4	25.6	*Entire workforce*		2.0	35.8	*Entire workforce*		4.4	39.8	*Entire workforce*		6.0	36.8
Minimum		-5.5	-16.0	*Minimum*		-1.2	-21.4	*Minimum*		-2.4	-27.0	*Minimum*		-4.6	-29.7
Maximum		8.8	35.6	*Maximum*		1.9	32.7	*Maximum*		6.9	28.9	*Maximum*		14.7	35.5

Note: Values are the difference (in percentage points) between the group-specific rate of atypical employment or unemployment and the rate among the entire workforce. Highlighted are those groups with significantly higher rates than the workforce average; based on EU-SILC 2007, data for Canada, USA and Australia is based on country specific household panels (see appendix 3).
Abbbreviations: Unemp. = deviation in percentage points of a group from the regime-mean of unemployment; part-time & temp = deviation in percentage points of a group from the regime-mean of involuntary part-time and temporary work; LSF are low service functionaries; SCP are socio-cultural professionals, BC are blue-collar workers, MSF are mixed service functionaries and CA are capital accumulators (see Table 1) Young means < 40; old means > 40.

Appendix 2.2 – Risk for atypical employment and unemployment in different groups of the workforce

	Liberal regime		**Nordic regime**		**Continental Regime**		**Southern regime**	
Risk for *unemployment*	% at risk	mean	% at risk	Mean	% at risk	Mean	% at risk	Mean
... among total workforce	47.3	0.3	24.9	0.3	54.9	0.1	36.9	0.2
... among women	48.5	8.0	26.4	0.2	56.0	0.7	42.7	1.6
... among young	70.5	5.4	33.5	0.3	66.3	0.7	76.3	4.0
... among low-skilled individuals	59.1	2.2	29.6	0.4	68.2	0.5	39.9	-0.7
... among high-skilled individuals	35.9	-0.7	17.8	-0.6	25.8	-0.9	36.7	-0.7
Risk for *involuntary part-time and temporary work*	% at risk	Mean	% at risk	Mean	% at risk	Mean	% at risk	Mean
... among total workforce	42.3	0.1	47.3	-2.2	47.8	-1.2	38.0	0.6
... among women	74.1	8.0	92.6	10.5	94.3	16.2	73.9	13.1
... among young	55.6	5.4	51.6	2.4	48.0	2.8	53.8	8.8
... among low-skilled individuals	44.5	2.2	46.9	-0.7	50.6	0.0	39.0	2.0
... among high-skilled individuals	40.5	-1.3	48.6	-5.1	43	-3.1	34.8	-4.3

Note:'% at risk' means the percentage of individuals which belong to a social group (see appendix 2.1) with a rate of unemployment or atypical employment that is significantly higher than the workforce average. 'Mean' denotes the average deviation (in percentage points) of the group-specific rates from the average workforce rates (see appendix 2.1). Numbers are based on the regime-specific operationalisations and based on EU-SILC 2007, data for Australia, Canada and USA is based on country-specific national household panels.

Appendix 3 – Table of operationalisation

Variable	Operationalisation
Income	ISSP WO III 2005; monthly mean income, individuals are attributed the mean value of their income group (mostly deciles) in 1000 Euros.
Promotion chances in current job	ISSP WO III 2005; opportunities for advancement are high; recoded V31; 1 = strongly disagree, 2 = disagree, 3 = neither/nor, 4 = agree, 5 = strongly agree
Preferences for active labour market policies	ISSP 2006 RoG IV; government is responsible for providing a job for everyone who wants one; recoded V25; 1 = definitely should not be, 2 = probably should not be, 3 = probably should be, 4 = definitely should be
Preferences for passive labour market policies	ISSP 2006 RoG IV; government should spend money on unemployment benefits; recoded V23; 1 = spend much less, 2 = spend less, 3 = spend the same as now, 4 = spend more, 5 = spend much more
Outsider (regime and country)	Dummy variable, based on a comparison of group-specific rates of atypical employment / unemployment and the regime(country)-specific average rate. EU-SILC 2007 For the USA: American Time Use Survey (ATUS) For Canada: Survey of Labour and Income Dynamics (SLID) For Australia: The Household, Income and Labour Dynamics in Australia (HILDA)
Outsiderness (regime and country)	Continuous variable, difference between group-specific rates of atypical employment / unemployment and the regime(country)-specific average rate. EU-SILC 2007 For the USA: American Time Use Survey (ATUS) For Canada: Survey of Labour and Income Dynamics (SLID) For Australia: The Household, Income and Labour Dynamics in Australia (HILDA)
Regimes	Liberal countries: Australia, Canada, Ireland, Great Britain, United States Nordic countries: Denmark, Finland, Norway, Sweden Continental countries: Austria, Belgium, France, Germany, Netherlands, Switzerland Southern countries: Italy, Greece, Portugal, Spain (Data for Austria, Belgium, Italy and Greece lacking in Table 3 and Table 4, data for the Netherlands lacking in Table 3)
Classes	ISCO-2d codes, recoded into CA, MSF, BC, SCP, LSF; see appendix 1 EU-SILC 2007: pl050 HILDA (AU): gjbm682 SLID (CA): nocj2e6, nocg, manag1 ATUS (USA): peio1ocd, prdtocc1
Unemployment	EU-SILC 2007; dummy variable measuring unemployment recoded from EU-SILC: pl030 HILDA (AU): gesdtl SLID (CA): altstat28 ATUS (USA): pemlr
Involuntary part-time	EU-SILC 2007; dummy variable measuring involuntary part-time work, recoded from pl030 (self-classification of respondents) and pl120 (reason for part-time work) HILDA (AU): gesdtl (self-classification of respondents) and gjbptrea (reason for part-time work)

	SLID (CA): scsum28 (self-classification of respondents) and reawpt1 (reason for part-time work) ATUS (USA): prwkstat (self-classification of respondents) and pehrwant (reason for part-time work)
Fix-term contract	EU-SILC 2007; dummy variable measuring fix-term contract work, recoded from pl140 HILDA (AU): gjbmcnt SLID (CA): prnjb1 ATUS (USA): CPS-Supplement (2005) “Contingent and Alternative Employment Arrangements"
Atypical work / Unemployment	EU-SILC 2007, HILDA (AU), SLID (CA), ATUS (USA); dummy variable measuring atypical employment (involuntary part-time, fix-term work, helping family member) and unemployment among all other employment status
Church attendance	ISSP RoG IV 2006, ISSP WO III 2005; recoded from ATTEND (how often do you go to church); 8 = several times a week, 7 = once a week, 6 = 2 or 3 times a month, 5 = once amonth, 4 = several times a year, 3 = once a year, 2 = less frequently, 1 = never
Living in a couple household	ISSP RoG IV 2006, ISSP WO III 2005; dummy variable measuring if respondent lives in a couple household (MARITAL and COHAB); 1 = living in a stable couple (married or not), 0 = divorced, widowed, single, separated
Education	ISSP RoG IV 2006, ISSP WO III 2005; dummy variable based on highest completed degree (DEGREE), 1 = completed higher secondary education, 0 = below higher secondary education