Outsiderness among young people in Europe:
A fuzzy set analysis

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Abstract
This paper applies fsQCA to examine the determinants of outsiderness among young people and aims to contribute to the dualisation literature. Dualisation scholars argue that the attempt to save the core manufacturing economy has been the structural driver of change, and emphasise the role of different welfare regimes to explain different degrees of dualisation. Although these scholars speak of the existence of different patterns of dualisation, they do not explain why in some countries it is mostly young labour market participants who are the outsiders. To address this puzzle, this paper criticises the rationalist-functionalist assumptions in which this literature relies and hypothesises that social conflict and deindustrialisation are necessary conditions for the outcome high levels of outsiderness among young people. The fsQCA analysis reveals two possible paths for the outcome and that social conflict and deindustrialisation are necessary for each of them. The first path combines the absence of dualisation, high employment protection, and low coordination in the industrial relations system, while the second path combines the absence of dualisation, the absence of high employment protection and liberalisation.

Keywords: segmentation, youth, labour market institutions, welfare state, social conflict, QCA

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1. INTRODUCTION

Several authors have pointed out that post-industrial labour markets have downplayed the position of young people, women and the low skilled (Esping-Andersen, 1999:306; Bonoli, 2006:3; Oliveira, Carvalho and Veloso, 2011:163; Price et al., 2011:4). This can be explained by the fact that young people hold a much weaker position in the labour market and are therefore endowed with few power resources. Taking into account the fact that post-industrial labour markets are characterised by a growing number of jobs in services and by the fact that these jobs are more insecure and less regulated by collective arrangements than jobs in the manufacturing sector, it is not surprising that young people are more vulnerable to this process and therefore more penalised. Notwithstanding, recent research has shown that some countries are much more vulnerable to this process than others (Lodovici, 2000; Blanchard, 2006:12; Ebbinghaus, 2006a:125; Chauvel, 2010; Häusermann and Schwander, 2012).

Recent research in the field of comparative political economy has pointed to a growing inequality across the Western European countries. These authors have pinpointed the process of dualisation as the main driver of change (Rueda, 2007; Palier and Thelen, 2010; Emmenegger et al., 2012). Although these scholars speak of the existence of different patterns of dualisation (Schwander and Hausermann, 2013), they do not explain why in some countries it is mostly young labour market participants who are the outsiders. In my view, its emphasis on efficiency to explain institutional change (inspired by the Varieties of Capitalism approach) contributes to this fact. Indeed, by arguing that the process of dualisation began with the attempt to save the core manufacturing economy, Palier and Thelen point to efficiency as the main driver of labour market reforms, given that comparative advantages would otherwise be undermined. In other countries however, it seems that the opposite has occurred, especially if we take into consideration the consequences of the divides based on age. Age dualities have contributed (especially during the crisis) to a dramatic increase in youth unemployment (e.g. in Southern European countries). If we take into account the fact that the younger generations are comparatively more educated, the situation becomes even more dramatic, due to the waste of productive potential. Therefore, rather than efficiency, a different cause must be identified to explain this process.

In this paper, I argue that to explain growing labour market inequalities based on age, a different analytic focus is necessary; one that, even though it borrows important insights from the recent literature on dualisation, departs from it in three ways. First, differences between the industrial relations systems must be highlighted. Rather than cross-class coalitions between trade unions and employer associations of the core manufacturing economy, what characterises some countries is the conflict between labour and capital. Second, I suggest placing more emphasis on
the process of liberalisation. Indeed, liberalisation scholars have made a powerful critique to the rationalist-functionalist assumptions in which the Varieties of Capitalism (VoC) approach relies and argue that in all capitalist economies change is driven by a process of market expansion and by the social conflicts associated with this process. Finally, although conflict plays a crucial role to explain labour market inequalities based on age, it is not the only driver of this process. In my view, it is also because some countries have seen an accelerated process of deindustrialisation (contrarily to what has happened in Continental Europe) that a growing number of outsiders among young people exist.

This paper applies fuzzy-set qualitative comparative analysis (fsQCA) to examine the determinants of outsidersness among young people in Europe. Based on my theoretical argument, I hypothesise that social conflict (due to either the low coordination in the industrial relations system or liberalisation) and deindustrialisation (due to the absence of dualisation) are necessary conditions for high levels of outsidersness among young people. The results show that the absence of dualisation and the combination of conditions low coordination in the industrial relations system and liberalisation are necessary conditions for the outcome high levels of outsidersness among young people. Furthermore, I find no evidence that high employment protection is a necessary condition for the outcome. As concerns the analysis of sufficient conditions, two possible paths for the outcome are identified: the first combines the absence of dualisation, high employment protection, and low coordination in the industrial relations system, while the second combines the absence of dualisation, the absence of high employment protection, and liberalisation.

The first section of this paper reviews the literature on labour market stratification, puts forward the theoretical argument, and presents the fuzzy-set hypotheses of this study. The second section begins by discussing why fsQCA is used in this paper. Thereafter, it presents each condition and the outcome, and discusses the results of the empirical analysis. Finally, the conclusion gives a brief summary and critique of the findings.
2. EXPLAINING GROWING LABOUR MARKET INEQUALITIES BASED ON AGE

A considerable amount of literature has been published about the existing divides in the labour market. Dual labour market theories (Doeringer and Piore, 1971) and economic insider-outsider theories (Lindbeck and Snower, 1988) are often cited as the most relevant literature in this area. More recently, a new approach – the dualisation literature – has gained importance within the field of comparative political economy (Rueda, 2007; Palier and Thelen, 2010; Emmenegger et al., 2012). As can be seen below, each of these three strands of literature has different analytical roots and attempts to deal with different socio-political challenges. I will begin by pinpointing the main features of each approach and thereafter describe the main differences between them. Finally, building on the literature reviewed in this section I put forward the hypotheses of this study.

2.1 Institutional versus mainstream economics: Disentangling the controversies among dualisation scholars

Dual labour market (DLM) theories have their roots in the American Institutionalist School (Doeringer and Piore, 1975:70; Cain, 1976:1226-1228; Bosworth et al., 1996:335; Leontaridi, 1998:68-69; Barbier, 2011:7-9), particularly in the contribution of Kerr (1954) and Dunlop (1957). Together with institutional economics, DLM scholars challenged classical and neo-classical explanations about the workings of the labour market. Indeed, against human capital theories, they argued that the labour market is not a single competitive market and that skills per se do not guarantee access to that labour market. For the DLM scholars several non-competing segments exist, as well as institutional barriers between them. They point to the existence of two sectors: a primary and secondary. The primary is characterised by having well developed internal labour markets in which institutional rules (formal and informal) substitute for market mechanisms. To explain this, DLM theories argue that firms in the primary sector depend more on their employees’ specific skills (acquired through on-the-job training and experience) and therefore develop strategies to protect their labour force from the risk of poaching (Rubery, 1978:19). The secondary sector covers workers outside internal labour markets (i.e. where the tasks performed by the workers depend less on specific skills). In this sector, supply and demand forces play a pivotal role, there exist more entry ports and therefore workers are more vulnerable to pressure from outside. While the primary sector is characterised by ‘relatively high wages, good working conditions,
chances of advancement, (...) and above all employment stability’ (Piore, 1975:126), the secondary sector is characterised by relying mainly on poor jobs (low wages, few promotion possibilities, poor working conditions and high labour turnover). As a consequence, the mobility of employees between segments is restricted and therefore excess demand pressures do not imply changes in the labour conditions in the primary sector. Finally, the socio-political context has also exerted great influence over dual labour market scholars. This approach has tried to provide an answer for the political concerns of the 1960s: structural unemployment, racial discrimination, poverty and inequality. Contrary to human capital theories (which argued that education and training programs could fight poverty), segmented labour market scholars stressed that poverty could only be tackled by providing access to primary employment to those excluded from it (Piore, 1970:55).

Economic insider-outsider theories emerged at the end of the 1980s. Rather than considering the rise of poverty and inequality, their puzzle relied on the intriguing high levels of structural unemployment in Europe, especially compared with the situation in the US where it was much lower (Blanchard, 2006:19). Against prevalent explanations based on the natural rate framework, they considered that short-term economic shocks were not the main reason behind unemployment. Moreover, economic insider-outsider theorists argued that market mechanisms were not able to explain the rise of structural unemployment. They pointed to the fact that a decline in productivity growth (due to rapid deindustrialisation throughout the 1980s) did not lead to an adjustment in wages (Emmenegger, 2009:133). To explain this, they preferred to blame labour market institutions by arguing that some workers are trapped in involuntary unemployment because labour market institutions impede competition between the unemployed (or those working in the informal economy) – the outsiders – and those already in the labour market – the insiders (Lindbeck and Snower, 1988). They point to the existence of conflicting interests between insiders and outsiders as a consequence, given that the latter prefer to dismantle existing labour market institutions (which impede their entrance into the labour market), while the former prefer the opposite, giving their intention as preserving their (good) jobs. When speaking of labour market institutions, economic insider-outsider theorists mean institutions that protect insiders from the competition of outsiders (e.g., severance-pay, seniority rules, requirements that firms give insiders advance notice of dismissal) (Lindbeck and Snower, 2001:167). Finally, although economic insider-outsider theory challenges classical explanations, this approach is built on the assumptions of mainstream economics, taking into account that, for them, institutions impede the optimal functioning of the market (Barbier, 2011:4).

Before turning to the dualisation framework, let me briefly summarise the differences between DLM theory and economic insider-outsider theory. We will then be in a better position to understand the existing controversies within the dualisation literature. Two main differences should
be underlined: its theoretical roots and its socio-political motivations. First, the separation between these two strands of literature is rooted in a broader debate between institutional economics and mainstream economics. While for institutional economics social groups and institutions are a crucial part of the functioning of the labour market and are indeed inseparable from it, mainstream economics emphasises the role of market mechanisms: for them institutions only disturb the functioning of the market. Second, each approach attempts to deal with different challenges: DLM scholars focused on the rising levels of poverty and inequality in the US, while the high level of structural unemployment in Europe was the conundrum behind the economic insider-outsider framework.

The dualisation literature provides interesting insights for understanding post-industrial labour markets. It has been inspired by the seminal work of David Rueda (2005; 2006; 2007). However, recent contributions have challenged Rueda’s initial framework: while Rueda has drawn on the economic insider-outsider theory, Palier and Thelen (2010) and Emmenegger et al. (2012) have mainly built their ideas on DLM theory. Following the economic insider-outsider framework, David Rueda has argued that ‘labor is divided into two segments: those with secure employment (insiders) and those without (outsiders) … [and that] the interests of insiders and outsiders are fundamentally different and, in some circumstances, contradictory’ (Rueda, 2007:2-3, insertions mine). Rueda goes beyond the economic insider-outsider framework in at least two ways. First, as well as the unemployed, he includes those with temporary jobs in the group of outsiders. Second, he argues that in the presence of conflict between different groups within the labour force, social democratic governments often do not promote the interests of the weakest members of society, and therefore exacerbate the gap between insiders and outsiders. This happens, Rueda argues, because insiders disproportionately vote for social democratic parties (being indeed its main constituency) and are over-represented within trade unions. Rueda stresses that for electoral reasons social democratic parties (together with trade unions) contributed to an increase in the gap between insiders and outsiders because they have promoted job security for the employed insiders instead of active labour market policies to support outsiders. The negative role of social democratic parties has however been challenged by others (Emmenegger, 2009:133-137; Palier and Thelen, 2010:121; Thelen, 2012). They argue that where social democratic parties are stronger (e.g. in the Nordic countries), dualistic trends are less pronounced. Second, Palier and Thelen put forward a different explanation for the growing levels of dualities by arguing that the attempt to save the core manufacturing economy has been the main driver of change towards dualisation in Continental Europe. Their argument has its roots in the concept of complementarities (see also Iversen and Soskice, 2009). They point to the fact that changes in one sphere of the political economy have contributed to changes in others as well. They defend the view that reforms during the 1980s and
1990s have shrunk the industrial sector’s size and therefore allowed the expansion of new types of jobs on the outside, giving rise to the emergence of a secondary labour market. To maintain a set of institutional comparative advantages, coordination between capital and labour was maintained in the core manufacturing economy (preserving therefore a number of stable and well remunerated jobs), but the expansion of the secondary sector contributed to the spread of poor jobs. Additionally, the welfare state has reinforced the problem in countries where the eligibility for benefits is historically based on past contributions. Indeed, as Emmenegger et al. (2012:10-16) have argued ‘politically and economically stronger groups are using their power resources to insulate themselves from the negative effects of [the] structural pressures, … thereby, changes in the labour market are translated into the social policy realm, where new distinctions arise or old institutional distinctions are re-activated’. By emphasising the role of policies, they stress that dualisation does not imply that all countries will necessarily experience high levels of insider-outsider divides. The existing differences between countries illustrate how some policies may reinforce dualisation while others (if, for instance, outsider policies are relatively generous) may reduce it.

But, even though policies are the main cause of the existing dualities; they only become important because of previous changes that have taken place in the labour market, which is why there exists a clear link between the argument of Palier and Thelen and that of Emmenegger et al. The same is not true of Rueda’s argument, considering his emphasis on the negative role of social democratic parties and trade unions. Contrary to Rueda’s point of view, Emmenegger et al. argue that social policies carried out by the social democratic parties in the Nordic countries are indeed the cause of lower levels of dualisation in those countries. Finally, while Rueda is focused on the high levels of unemployment (as the economic insider-outsider scholars), Emmenegger et al. (2012:3-4) are mainly concerned with the increasing levels of poverty and inequality.

Comparing these two approaches, I consider Rueda’s perspective too much focused on unemployment. Indeed, due to its mainstream assumptions it does not pay enough attention to job quality. As the empirical results of this paper will show, less employment protection does not guarantee, per se, less labour market segmentation based on age. The approach put forward by Palier and Thelen is better placed to address the issue of job quality, but it also has its limitations. Regardless of its merits, it is difficult to explain growing labour market inequalities based on age with the dualisation framework. This is, in my view, related with the pitfalls of rational choice

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3 Palier and Thelen’s argument points to the same type of institutions Doeringer and Piore (1971) identified in the 1970s to explain the existing dualities in U.S. labour markets. Indeed, what Palier and Thelen call ‘the core manufacturing economy’ is similar to what Doeringer and Piore called, in the 1970s, the primary sector (characterised by well-developed internal labour markets).
institutionalism, namely its tendency to see institutions as ‘guardians’ of efficiency (Streeck, 2010:22-23; Howell, 2003:110). While the conceptual framework of dualisation is well suited to explain Continental and Nordic countries pattern of dualisation, the same does not apply to Southern Europe and to the Anglo-Saxon countries. Recently, Hausermann and Schwander have provided empirical evidence about the process of dualisation across regimes and by doing so have shown that different patterns of dualisation exist: ‘in the Nordic and Continental countries, gender is the most important criteria, while in Southern European regimes it is mostly young labour market participants who are potential outsiders, and in the Anglo-Saxon countries, outsiders are predominantly found among the low-skilled’ (2012:34). The gender divide reflects the split between jobs in industry (where males are over-represented) versus jobs in services. As regards the Anglo-Saxon case, the existing divides have their roots in differences within the service sector. Indeed, contrary to what has happened in Continental Europe, the core manufacturing economy was not saved in the 1980s (Margaret Thatcher’s era). As for Southern Europe, it also lacks the logic of complementarities extant in Continental and Nordic countries (Molina and Rhodes, 2007). As its industrial sector was much less competitive (relying mainly on low wages rather than on specific skills) than its counterparts in Continental Europe, reforms during the 1980s and 1990s did not save the core manufacturing economy. We must therefore innovate conceptually in order to integrate the existing diversity into the dualisation literature.

2.2. Conflict and deindustrialisation: The drivers of dualisation based on age

The above-mentioned tendency to see institutions as ‘guardians’ of efficiency (and therefore of stability) has concealed crucial features of some countries and has neglected the conflictual logic of the capitalist system. In my view, this has contributed to a lack of understanding of the growing labour market inequalities based on age. To overcome these problems, it is crucial to highlight the distinctive characteristics of the industrial relations system in some countries and to place greater emphasis on liberalisation. Finally, it is also necessary to underline that it is precisely the fact that some countries have seen an accelerated process of deindustrialisation (contrarily to what has happened in Continental Europe) that has led to a growing number of outsiders among young people.

European countries diverge regarding the functioning of the industrial relations system: while more cooperative relations between social partners characterise Continental and Scandinavian countries, more conflictual relations historically characterise Southern Europe and Anglo-Saxon countries. Colin Crouch (1993:61–62) analysed how the industrial relations system evolved in a large set of European countries between 1870 and 1990 and stressed the existence of
three ideal types of interest intermediation: (i) contestative relations, (ii) pluralist collective bargaining, and (iii) neo-corporatism. As is well documented, contestative relations characterise Southern Europe, and pluralist relations the Anglo-Saxon countries (Goetschy, 1998; Regini and Regalia, 1998; Ebbinghaus, 2006b:73; Molina and Rhodes, 2007; Lima and Naumann, 2011). The conflictual logic of some industrial relations systems is problematic to the dualisation framework given the emphasis that this literature places on cooperation in the core manufacturing economy. Indeed, to see trade unions, which historically followed a class struggle approach, as guiding their behaviour by strategic coordination with the employers of the core manufacturing economy is, at the minimum, debatable. In spite of this, in my opinion, a different point must be highlighted: in countries with low levels of coordination between labour and capital the low levels of union density led unions to represent their members first and foremost and to neglect the remaining workers (i.e., to protect those workers with more political power rather than those in a weaker position). This happened not because labour market insiders acted against outsiders but because they preferred confrontation instead of cooperation with employers. Since younger generations are less unionised and therefore have less political power, this process has particularly affected them.

Furthermore, social conflict can also result from market expansion, as liberalisation scholars have emphasised. The liberalisation literature, as an institutional theory of capitalism, emphasises the communalities between countries rather than their varieties and criticises the functionalist’s assumptions on which the VoC relies (Streeck, 2009:Chapter 13). Drawing on Polanyi’s (1944) ‘double movement’ of market expansion and market containment thesis, it argues that in all capitalist economies, change is driven by a process of market expansion and by the social conflicts associated with this process. This emphasis on the conflictual logic of the capitalist system (Streeck, 2009:5–6), is very much in line with the point I stressed above: politics plays a crucial role in countries with more conflictual relations since those who are more organised (and hold more political power) are the insiders, rather than those with more specific skills. The social

4 For ‘dualisation framework’ I here mean the perspective of Palier and Thelen (2010).
5 Although dualisation scholars often contrast their perspective with the liberalisation framework (Thelen, 2012:138-139; Palier and Thelen, 2010:120; Emmenegger et al., 2012:10) in my view these two strands of literature are not incompatible. Against some misconceptions, liberalisation does not claim the end of strategic coordination between capital and labour (Streeck, 2009:158), and does not argue that all capitalist economies are converging towards the ‘liberal market economy’ model (Streeck, 2009:168). What Streeck does defend is that the German political economy underwent a process of liberalisation that led to a shift from organised to disorganised capitalism (rather than from a coordinated to an uncoordinated system – from Streeck’s point of view, coordination may go hand-in-hand with disorganisation). This fact is, in my opinion, very much in line with the dualisation literature: as Streeck (2009:51) notes: ‘liberalization, in other words, sets actors free from institutionalized obligations, allowing solidarism to be overruled by segmentalism (...), but does not preclude and is not incompatible with coordination in a “coordinated market economy”, provided such coordination comes about voluntarily and from below’.

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countermovements have protected these workers more, but this is neither an efficient nor a stable solution.\footnote{Note that contrarily to economic insider-outsider scholars, the liberalisation framework does not see conflict as a constraint that disturbs the functioning of the market, but as an intrinsic feature of capitalism. In their view it is market expansion that triggers social conflict and not the conflicting interests between insiders and outsiders.}

By arguing that the dualisation framework is particularly well suited to explaining the situation in Continental and Nordic European countries, I do not mean that the emphasis on differences between the primary and the secondary sector is useless for understanding the situation in Southern Europe and Anglo-Saxon countries. In my view, that emphasis is crucial, but for the opposite reason. I argue that it is precisely the fact that some countries have seen an accelerated process of deindustrialisation that has led to a growing number of outsiders among young people. Indeed, while in Continental Europe the manufacturing sector still provides access to good jobs, the same does not apply to the Southern and Anglo-Saxon countries. For instance, in Southern Europe, the massive process of delocalisation of multinationals since the 1980s (e.g. in the textile sector) has dramatically reduced the share of jobs in the manufacturing sector. The new generations entering the labour market after/during this process have been severely affected. The deterioration of the position of young people on the labour market is therefore directly related to the reduction of the primary sector.

Thus, these two factors – social conflict and deindustrialisation – are the cornerstone of my theoretical argument: they both have to be present in order to produce high levels of outsiders among young people. Deindustrialisation reduces job quality and social conflict leads to an uneven distribution of risk across different social groups because political power is unevenly distributed. Therefore, I hypothesise that social conflict (due to either the low coordination in the industrial relations system or liberalisation) and deindustrialisation (due to the absence of dualisation) are necessary conditions for high levels of outsiders among young people. Moreover, although I criticise the emphasis placed by the economic insider-outsider framework on the role of employment protection, it seems plausible to hypothesise that employment protection is an INUS condition, that is, an insufficient but non-redundant part of an unnecessary but sufficient (combination of) conditions(s) (Schneider and Wagemann, 2012:79). Indeed, it is plausible that employment protection in combination with an uncoordinated system of industrial relations and the absence of dualisation constitute one path toward high levels of outsiders among young people. However, alone this condition is neither necessary nor sufficient.
3. METHODS AND DATA

This paper applies fsQCA (Ragin, 2008; Schneider and Wagemann, 2012) to examine the determinants of outsiderness among young people, a method that has been gaining in popularity and application. Three main reasons explain the choice of this method. First and foremost, to test the two hypotheses put forward above I need a data analysis technique that tests the existence of a complex causal explanation for high levels of outsiderness among young people. FsQCA places a great emphasis on complex causal explanations. Contrary to statistical methods, which focus mainly on the net effect and statistical significance, fsQCA focuses on how causal conditions combine to generate outcomes. The net effect and statistical significance of each variable are based on their unique contributions to explain the dependent variable. In contrast, case-oriented research, focuses predominantly on different combinations of conditions that lead to a certain outcome. That is, with QCA ‘the uniformity of causal effects is not assumed; on the contrary, a given condition may, combined with different others, sometimes act in favour of the outcome, and sometimes, differently combined, act against it’ (Rihoux and Ragin, 2009:9). Second, in the last section it is argued that dualisation in some countries is very much age-based. To test if my theoretical argument explains the outcome in Southern and Anglo-Saxon countries I need a data analysis technique that allows the existence of different independent explanatory paths. This is the case with fsQCA, since ‘multiple conjunctural causation contains the notion of equifinality, which simply means that different paths can lead to the same outcome’ (Rihoux and Ragin, 2009:8). Finally, I opt for fsQCA because this analysis entails the ‘few cases, many variables’ problem. Besides the above-mentioned problems with statistical analyses (namely its focus on the net effect), regression analysis is not especially useful here because the relatively small number of cases would produce unreliable results.  

This section has been divided into two parts. The first part will present the calibration of the outcome and conditions. The second part will then proceed to discuss the results of the empirical analysis, namely through the analysis of necessary conditions and sufficient conditions.

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7 This analysis is based on 14 cases (Ireland, United Kingdom, Denmark, Finland, Sweden, Austria, Belgium, France, Germany, Netherlands, Spain, Greece, Italy and Portugal).

8 Qualitative research and quantitative research are each based on a separate tradition: case-oriented versus variable-oriented, respectively (Goertz and Mahoney, 2012). While in the first tradition measures are usually calibrated (i.e., the focus is on the degree to which cases satisfy membership criteria), in the second, usually no attempt is made to look at cases or to interpret if a certain difference is relevant or meaningful – all variation is considered relevant. For instance, to classify the level of development across countries, the dominant quantitative approach normally uses indicators (e.g., the national income per capita) and considers a country as being highly developed (or vice versa) depending on whether its score is above (or below) the sample’s central tendency (usually the mean). On the contrary, qualitative researchers usually use external information (e.g., what is necessary to consider a country developed) to distinguish most- and least-developed countries. However, from the perspective of conventional quantitative research, qualitative researchers skew their measurements to fit their preconceptions, and therefore quantitative researchers see
3.1. Data

Following Marx (2006), who has argued that a moderate ratio of conditions to cases is required to ensure the validity of results, this analysis has four conditions: high levels of dualisation (D), high levels of employment protection (EP), low levels of coordination in the industrial relations system (LCO), and high levels of liberalisation (L). This section first presents the outcome high levels of outsiderness among young people (YO) and thereafter presents each condition. The calibration of fuzzy set scores is discussed in detail, following the instructions of Ragin and Sonnet (2005:193), who have argued that the calibration must be presented as transparently as possible. The direct method of calibration (Ragin, 2008) is used to calibrate the fuzzy set score for the outcome and for the four conditions. The fuzzy set scores are displayed in Table 1. Finally, besides relying on theoretical knowledge, I used obvious value breaks among the cases to set three qualitative anchors, and I have made sure that no cases are classified on the crossover point. This same procedure is followed in all four conditions. Table 2 summarises the qualitative anchors for both the outcome and the conditions.

High levels of outsiderness among young people (YO). Given the focus on the differences between age groups (rather than on the overall number outsiders) the outcome under study is the high levels of outsiderness among young people, which is calculated as the percentage point difference between the proportion of outsiders among young people (< 40 years old) and the proportion of outsiders among older age groups (> 40 years old). In this study I follow Hausermann and Schwander’s (2012; Schwander and Hausermann, 2013:252-254) definition of outsiders: they are defined as those belonging to occupational groups that incur a particularly high probability (i.e., statistically significant) of atypical employment and/or unemployment. Taking into account that Hausermann and Schwander analyse separately different groups of countries, occupational groups characterised by atypical employment/unemployment differ in each country. To compute the proportion of outsiders among young people, the following procedures were performed. First, for each country, the number of young individuals who belong to occupational groups that incur a statistically significant atypical employment and/or unemployment is counted. Then, the proportion of outsiders among young people is calculated as the percentage point difference between the proportion of outsiders among young people and the proportion of outsiders among older age groups.

Qualitative approaches as less precise. Ragin argues, however, that ‘with fuzzy sets, it is possible to have the best of both worlds, namely the precision that is prized by quantitative researchers and the use of substantive knowledge to calibrate measures that is central to qualitative research’ (2008:82). Following the procedures put forward by Ragin (2008), to calibrate raw data it is necessary to decide where the point of maximum indifference regarding membership versus non-membership is located (0.5), to define the point of full membership (1.0) and the point of non-membership (0.0).

A condition is a ‘factor which is used to explain the outcome. In set-theoretic methods, there are different types of conditions, such as necessary, sufficient, SUIN, and INUS conditions’ (Schneider and Wagemann, 2012:323). An outcome is a ‘phenomenon to be studied in an analysis’ (Schneider and Wagemann, 2012:330). Other authors (Rueda, 2005:63; 2006:395; 2007:14-15; Emmenegger, 2009:137; Lindvall and Rueda: 2012:296-297; Davidson and Emmenegger, 2013:360) have defined outsiders simply as those who are currently unemployed or holding part-time jobs, fixed-term contracts, or temporary jobs.
particularly high probability of being in atypical employment and/or unemployment was computed. Second, it was established that insiders are considered as those who belong to occupational groups that do not face a high probability of being in atypical employment. Finally, the proportion of outsiders among young people was calculated. The same procedure was followed to calculate the proportion of outsiders between the older generations. With regard to databases, with exception of Austria and Italy, the European Social Survey 2010 Round 5 is used (ESS, 2010). Since Austria did not participate in the ESS 2010 Round 5, the ESS Round 4 – 2008 database is used for the Austrian case (ESS, 2008). As Italy has not participated in ESS since 2004, the International Social Survey Programme 2009 ‘Social Inequality IV’ database is used (ISSP, 2012).

High levels of dualisation (D). In line with the perspective of Palier and Thelen (2010), this macrovariable joins sets ‘share of the primary sector among young people’ and ‘change towards less welfare state generosity’ by ‘logical AND’. To measure the weight of the primary sector I use the absolute skill specificity, an indicator that assigns a different degree of skill specificity to different occupations (Iversen and Soskice, 2001; Cusack et al., 2006). Using the ESS 2010 (see above-mentioned exceptions), one can calculate the degree of absolute skill specificity attached to each occupational group, and to compute the proportion of workers holding jobs that require high levels of skill specificity. Thereafter, workers in the occupational groups with high levels of skill specificity (‘craft and related trades workers’; ‘plant and machine operators and assemblers’; and ‘technicians and associate professionals’) are considered as belonging to the primary sector. Finally, I calculate the share of workers in the primary sector among young people (< 40 years old).

To assess changes in terms of welfare state generosity, I follow in this study the procedure put forward by Scruggs (2007; 2014), namely by using the generosity index. Using data provided by the ‘Comparative Welfare Entitlements Dataset 2. Version 2014-03’ (Scruggs, Jahn and Kuitto, 2014), I first calculate the index for two different years (1990 and 2010), and thereafter, the difference between 2010 and 1990 is calculated. A positive value means that generosity has grown, while a negative figure indicates that generosity has dropped. This period (1990-2010) is analysed because dualisation scholars argue that this process took place during the 1980s and 1990s (Palier and Thelen, 2010:126).

High levels of employment protection (EP). Two sub-indicators are used to measure employment protection: the ‘employment protection index’, and ‘collective bargaining coverage’. The first is taken from the ‘OECD Indicators of Employment Protection’ (OECD, 2013a), while the second is

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11 As for the operationalization of each occupational group see Schwander and Hausermann (2013:266).
12 See the Excel spreadsheet showing the calculation of the specificity measure, available at: http://www.people.fas.harvard.edu/~iversen/SkillSpecificity.htm
taken from the ‘Data Base on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts, 1960-2011 (ICTWSS)’ (Visser, 2013). The OECD indicators cover three broad aspects of employment protection regulations: ‘protection for regular contracts’, ‘protection for temporary contracts’, and ‘collective dismissals protection’ (Venn, 2009). With regard to the weights given to each item, following the suggestions made by Emmenegger (2011, online appendix), three changes to the original weights of the employment protection index were performed. First, instead of using equal weights for the two level 2 indicators for temporary contracts (‘fixed-term contracts’ and ‘temporary work agency employment’), the minimum of the two is used. Second, instead of using equal weights for the three indicators for the regulation of regular contracts, the weight of the indicator ‘difficulty of dismissal’ is increased (from $1/3$ to $1/2$), while those of the other two indicators (‘procedural inconveniences’, and ‘notice period and severance pay for non-fault dismissals’) are decreased (both from $1/3$ to $1/4$). Third, instead of using equal weights for the three different aspects of employment protection regulations, the regulation of regular contracts is weighted at $3/4$ and the regulation of temporary work at $1/4$. In many European countries, collective agreements or individual contracts may include provisions more generous than those within legislation (Venn, 2009:16; Emmenegger, 2011). Therefore, ‘collective bargaining coverage’ is also used. To calculate the additive indicator, I have standardised the two indicators to range between 0 and 4. Since the ‘employment protection index’ is the crucial sub-indicator in this condition, the two indicators are added using different weights: $4/5$ and $1/5$ respectively. Finally, data for the employment protection index refers to the average between 2008 and 2010, while data for collective bargaining coverage refers to 2010 (due to data availability).

**Low levels of coordination in the industrial relations system (LCO).** The following dimensions are used to measure the level of coordination in the industrial relations system: ‘coordination of wage-setting’, ‘employers’, and ‘organised labour’. All the indicators in this condition were taken from the ICTWSS database (Visser, 2013). Regarding the first dimension (wage coordination), I have used the indicator ‘coordination of wage-setting’, which is based on Kenworthy (2001). To complement the information gathered in the first indicator, information on the level of organisation of labour and capital are also provided (Ebbinghaus, 2006b:74), namely employers’ density and union density. To calculate the additive indicator, I have first standardised the three indicators to range between 0 and 4. Instead of using equal weights for the three different sub-indicators, I have given greater weight to the first sub-indicator: wage coordination is weighted at $1/2$, while employers’ organisation density and union density are weighted at $1/4$ each. The average for the
period 1980-2011 is calculated because the objective is to capture the pattern of coordination in these countries, rather than the coordination in a specific period.

High levels of liberalisation ($L$). To calculate this condition, two sub-indices are used: the index of product market regulation, and the weight of the financial sector (Glyn, 2006; Streeck, 2009). The first is taken from the ‘OECD Product Market Regulation Database’ (OECD, 2013b), while the second is taken from the ‘Eurostat National Accounts Database’ (Eurostat, 2008). The OECD index of the degree of product market regulation is used to measure the process of market expansion and privatisation. This index covers three general regulatory issues on fields such as: state control of business enterprises, legal and administrative barriers to entry, and barriers to international trade and investment (Wolfl et al., 2009). Since the index only covers the period between 1998 and 2008, the difference between these two years is calculated. With regard to the rise of the financial sector, I calculate the weight of financial activities and insurance activities on the Gross Value Added (at basic values, millions of euro, chain-linked volumes, reference year 2005), in 2008. Finally, to calculate the additive indicator, I have standardised the two indicators to range between 0 and 4, and have calculated the average score for every country.

<table>
<thead>
<tr>
<th>Countries</th>
<th>YO</th>
<th>D</th>
<th>EP</th>
<th>LCO</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>0.00</td>
<td>0.14</td>
<td>0.73</td>
<td>0.06</td>
<td>0.67</td>
</tr>
<tr>
<td>Belgium</td>
<td>0.08</td>
<td>0.16</td>
<td>0.70</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Denmark</td>
<td>0.58</td>
<td>0.25</td>
<td>0.40</td>
<td>0.22</td>
<td>0.67</td>
</tr>
<tr>
<td>Finland</td>
<td>0.38</td>
<td>0.51</td>
<td>0.63</td>
<td>0.00</td>
<td>0.57</td>
</tr>
<tr>
<td>France</td>
<td>0.30</td>
<td>0.64</td>
<td>1.00</td>
<td>1.00</td>
<td>0.63</td>
</tr>
<tr>
<td>Germany</td>
<td>0.06</td>
<td>0.95</td>
<td>0.63</td>
<td>0.39</td>
<td>0.60</td>
</tr>
<tr>
<td>Greece</td>
<td>0.89</td>
<td>0.03</td>
<td>0.87</td>
<td>1.00</td>
<td>0.08</td>
</tr>
<tr>
<td>Ireland</td>
<td>0.83</td>
<td>0.00</td>
<td>0.27</td>
<td>0.58</td>
<td>1.00</td>
</tr>
<tr>
<td>Italy</td>
<td>1.00</td>
<td>0.09</td>
<td>0.93</td>
<td>0.83</td>
<td>0.77</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0.01</td>
<td>0.16</td>
<td>0.67</td>
<td>0.33</td>
<td>0.83</td>
</tr>
<tr>
<td>Portugal</td>
<td>0.81</td>
<td>0.00</td>
<td>0.97</td>
<td>1.00</td>
<td>0.73</td>
</tr>
<tr>
<td>Spain</td>
<td>0.79</td>
<td>0.08</td>
<td>0.87</td>
<td>0.75</td>
<td>0.93</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.52</td>
<td>0.56</td>
<td>0.60</td>
<td>0.11</td>
<td>0.53</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0.81</td>
<td>0.04</td>
<td>0.00</td>
<td>1.00</td>
<td>0.57</td>
</tr>
</tbody>
</table>

Table 2 – Qualitative anchor points for the calibration of fuzzy sets

<table>
<thead>
<tr>
<th>Outcome/condition</th>
<th>Fully out</th>
<th>Crossover point</th>
<th>Fully in</th>
</tr>
</thead>
<tbody>
<tr>
<td>High levels of outsiders among young people</td>
<td>8.0</td>
<td>17.0</td>
<td>53.0</td>
</tr>
<tr>
<td>Share of the primary sector among young people*</td>
<td>25.0</td>
<td>34.0</td>
<td>44.0</td>
</tr>
<tr>
<td>Change towards less welfare state generosity*</td>
<td>4.0</td>
<td>0.0</td>
<td>-4.0</td>
</tr>
<tr>
<td>High levels of employment protection</td>
<td>0.0</td>
<td>1.5</td>
<td>3.0</td>
</tr>
<tr>
<td>Low levels of coordination in the industrial relations system</td>
<td>3.0</td>
<td>2.1</td>
<td>1.5</td>
</tr>
<tr>
<td>High levels of liberalisation</td>
<td>0.9</td>
<td>1.5</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Note: *The fuzzy set ‘high levels of dualisation’ is the intersection of the fuzzy sets ‘workers in the primary sector among young people’ and ‘change towards less welfare state generosity. 
3.2. Analysis of necessary and sufficient conditions

Following Schneider and Wagemann (2010:8), necessary and sufficient conditions are analysed in separate analytical steps, with the analysis of necessary conditions preceding the analysis of sufficiency.

3.2.1. Necessary conditions for the outcome ‘high levels of outsiderness among young people’

Table 3 displays the results of the analysis of the necessary\(^\text{13}\) conditions for the outcome high levels of outsiderness among young people, namely the consistency\(^\text{14}\) and coverage measures for necessary conditions. Taking into account that for necessary conditions a consistency threshold of at least 0.90 is required (Schneider and Wagemann, 2012:143), Table 3 shows that the absence of dualisation is a necessary condition for the outcome, which supports the first part of the main hypothesis. On the other hand, an analysis of necessary conditions can also be performed by combining conditions via logical ‘OR’ (Schneider and Wagemann, 2012:71-75). However, this strategy ‘only makes sense if there are strong and plausible theoretical or substantive arguments to support the claim that the conditions combined by logical OR operate as *functional equivalents*’ (Schneider and Wagemann, 2012:74). This is the case for both the lack of coordination in the industrial relations system and liberalisation. As the second part of the main hypothesis states, conflict plays a crucial role in explaining divides based on age, high levels of outsiderness among young people is expected in countries with either (i) low coordination in the industrial relations system, (ii) liberalisation, or (iii) both. As can be seen in Table 3, this is the case. The consistency value in the combination of conditions LCO+L is very high; therefore, this combination is a necessary condition for the outcome. Finally, the analysis of necessary conditions is graphically presented through XY plots\(^\text{15}\): Figure 1 shows that for the absence of dualisation, only two cases are clearly located above the diagonal, and regarding LCO+L, only two cases are located above the diagonal. However, in both graphs other cases are clearly below the diagonal. This means that while low coordination in the industrial relations system, or liberalisation are necessary for the outcome, their presence is not sufficient (e.g., see the French case). The same applies to the other

\(^{13}\) A condition (or a combination of conditions) is considered to be necessary (even if not sufficient) if the outcome cannot occur in the absence of the condition (Schneider and Wagemann, 2012:69-76).

\(^{14}\) As Schneider and Wagemann noted, ‘the consistency measure for necessary conditions assesses the degree to which the empirical information at hand is in line with the statement of necessity, i.e., how far the outcome can be considered a subset of the condition’, while the ‘standard coverage measure for necessary conditions is better interpreted as a measure of the relevance of a necessary condition. High values indicate relevance, whereas low values indicate trivialness’ (2012:143-147).

\(^{15}\) XY plots show whether a specific condition is necessary. They offer graphical insights on whether a necessary condition might be trivial empirically. For a condition to be necessary, all cases should be located around or below the bisecting line (Ragin, 2000:215; Schneider and Wagemann, 2012:76).
necessary condition: the absence of dualisation is necessary for the outcome but it is not sufficient on its own (e.g., see the cases of Belgium, Netherlands, and Austria).

In short, the analysis of necessary conditions supports the main hypothesis. First, the absence of dualisation is a relevant (coverage 0.662) and consistently (0.975) necessary condition for the outcome. Second, the combination of conditions LCO+L is a relevant (0.641) and consistently (0.965) necessary condition for the outcome.

Table 3 – Analysis of necessary conditions for the outcome ‘high levels of outsiderness among young people’

<table>
<thead>
<tr>
<th>Condition</th>
<th>Consistency</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>d</td>
<td>0.975</td>
<td>0.662</td>
</tr>
<tr>
<td>L</td>
<td>0.796</td>
<td>0.655</td>
</tr>
<tr>
<td>LCO</td>
<td>0.761</td>
<td>0.739</td>
</tr>
<tr>
<td>EP</td>
<td>0.768</td>
<td>0.585</td>
</tr>
<tr>
<td>LCO+L</td>
<td>0.965</td>
<td>0.641</td>
</tr>
</tbody>
</table>

Figure 1 – Necessary conditions for the outcome ‘high levels of outsiderness among young people’
3.2.2. Sufficient conditions for the outcome ‘high levels of outsiderness among young people’

With regard to the analysis of sufficient conditions, this section begins by displaying the truth table and explaining the process of Boolean minimisation.\(^\text{16}\) Thereafter, the solution term and parameters of fit are discussed. Finally, I conduct a series of tests to assess the robustness of the obtained solution term.

Table 4 displays the truth table. The table reveals eight logical remainders, that is, configurations with no empirical observations. To overcome the problem of limited diversity (i.e., the presence of logical remainders), I draw on the strategy suggested by Ragin (2008): the ‘Standard Analysis procedure’. It consists of producing the complex solution (without assumptions about logical remainders), the most parsimonious solution (all simplifying assumptions), and the intermediate solution (only easy counterfactuals). In this study, only those counterfactuals that correspond to the theoretical expectations (easy counterfactuals) are incorporated. Therefore, the results presented in this section refer to the intermediate solution. For the analysis of sufficient conditions of the outcome high levels of outsiderness among young people I used a consistency threshold for sufficient rows of 0.76. There are three principal reasons for this: following Schneider and Wagemann (2012:127), values below 0.75 are considered problematic as they have consequences for the subsequent analysis; no true logically contradictory cases exist (Schneider and Wagemann, 2012:182-186), and the threshold is also justified by a large gap below the consistency value of 0.76. Finally, the software\(^\text{17}\) minimises the truth table using Boolean algebra\(^\text{18}\) and identifies the combinations of conditions that are sufficient to produce the outcome.

The solution term and the parameters of fit\(^\text{19}\) (raw coverage, unique coverage, consistency, solution consistency, and solution coverage) are presented in Table 5. The solution shows satisfactory consistency (0.883) and coverage (0.888). The analysis of the sufficient conditions shows two possible paths for the outcome. The first path combines the absence of dualisation, high employment protection, and low coordination in the industrial relations system (Figure 2, right hand), while the second path combines the absence of dualisation, the absence of high employment protection, and liberalisation (Figure 2, left hand). This solution explains high levels of outsiderness among young people in Portugal, Spain, Italy, Greece, Ireland, United Kingdom, and Denmark. Therefore, the solution term can explain every country except Sweden. Note however

\(^\text{16}\) A condition is sufficient for an outcome if the outcome always occurs when the condition is present. However, the outcome could also result from other conditions.

\(^\text{17}\) In this analysis I use the R Package ‘QCA’, version 1.1-2 (Dusa and Thiem, 2012; Thiem and Dusa, 2013).

\(^\text{18}\) In Boolean logic, logical AND (*) refers to the intersection of sets and logical OR (+) to the union of sets. Furthermore, capitals indicate the presence of a condition, and lower cases its absence.

\(^\text{19}\) Raw coverage indicates how much of the membership in the outcome is covered by the membership in a single path. The unique coverage indicates how much a single path uniquely covers. Consistency indicates how well a given solution set explains the outcome in question. The solution coverage expresses how much is covered by the entire solution term (Schneider and Wagemann, 2012:139).
that Sweden, in comparison with the countries that are more in than out of the set of countries with high levels of outsiderness among young people, is the one with the smallest fuzzy set score (0.52). Finally, Figure 2 presents the results graphically. This figure shows whether the combination of conditions d*EP*LCO and the combination of conditions d*ep*L are sufficient. For a condition to be sufficient, all cases should be located around or above the bisecting line (Ragin, 2000:236; Schneider and Wagemann, 2012:69).

The previously identified necessary conditions (d, and LCO+L) can also be found in the analysis of sufficient conditions. All countries with high levels of outsiderness among young people exhibit the absence of dualisation. Furthermore, they also exhibit either low coordination in the industrial relations system, or liberalisation. However, the absence of dualisation, liberalisation, and low coordination in the industrial relations system alone are not sufficient conditions: Austria, the Netherlands, and Belgium exhibit the absence of dualisation but no high levels of outsiderness are observed; Austria, Finland, the Netherlands, France and Germany, exhibit liberalisation but no high levels of outsiderness among young people; France has low coordination in the industrial relations system, and liberalisation, but no high levels of outsiderness among young people. France is indeed a very interesting case; it combines several characteristics of the Southern European case but it also has high levels of dualisation. Therefore, although necessary, the absence of dualisation, liberalisation and low coordination in the industrial relations system are not sufficient alone.

The analysis of sufficient conditions supports the second hypothesis – that high employment protection is an INUS condition –, taking into account that the first path is the combination of absence of dualisation, high employment protection, and low coordination in the industrial relations system. The analysis of sufficient conditions contains however an unexpected and interesting result: if in combination with the absence of dualisation and liberalisation, the absence of high employment protection is an INUS condition. This fact illustrates how simplistic it is to focus the analysis on single variables rather than on complex causal explanations. Furthermore, it also shows how simplistic it is to see the reduction of employment protection as the best solution to tackle labour market segmentation. Finally, it is significant that of the total solution’s coverage of 88.8% (based on the so-called unique coverage of the paths), 46.0% is uniquely due to the first path (d*EP*LCO), while the second path (d*ep*L) uniquely covers 29.0%.
Table 4 – Truth table for the analysis of sufficient conditions for the outcome ‘high levels of outsiderness among young people’

<table>
<thead>
<tr>
<th>D</th>
<th>EP</th>
<th>LCO</th>
<th>L</th>
<th>Cases</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>Greece</td>
<td>0.884</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>Italy, Portugal and Spain</td>
<td>0.882</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>Ireland and United Kingdom</td>
<td>0.830</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>Denmark</td>
<td>0.769</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>Finland, Germany, and Sweden</td>
<td>0.589</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>Austria, Netherlands</td>
<td>0.578</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>Belgium</td>
<td>0.569</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>France</td>
<td>0.508</td>
</tr>
</tbody>
</table>

Table 5 – Analysis of sufficient conditions for the outcome ‘high levels of outsiderness among young people’

<table>
<thead>
<tr>
<th>Solution term</th>
<th>d<em>EP</em>LCO +</th>
<th>d<em>EP</em>L □ YO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw coverage</td>
<td>0.598</td>
<td>0.428</td>
</tr>
<tr>
<td>Unique coverage</td>
<td>0.460</td>
<td>0.290</td>
</tr>
<tr>
<td>Consistency</td>
<td>0.876</td>
<td>0.832</td>
</tr>
<tr>
<td>Covered cases*</td>
<td>Italy, Portugal, Spain, and Greece</td>
<td>Ireland, United Kingdom, and Denmark</td>
</tr>
<tr>
<td>Solution consistency</td>
<td>0.883</td>
<td></td>
</tr>
<tr>
<td>Solution coverage</td>
<td>0.888</td>
<td></td>
</tr>
<tr>
<td>Uncovered cases**</td>
<td>Sweden</td>
<td></td>
</tr>
</tbody>
</table>

Note: Consistency threshold 0.76. The complex and intermediate solutions are identical. The parsimonious solution is ep + d*LCO □ YO (coverage: 0.938, consistency: 0.800).

* Cases with membership in path > 0.5
** Cases with membership in solution < 0.5 and outcome > 0.5

Figure 2 – Sufficient condition for the outcome ‘high levels of outsiderness among young people’
Following Schneider and Wagemann (2012:284-294), a series of tests to assess the robustness of the analysis are carried out. First, I have change the score of the case just above the crossover point to 0.49, and the case just below the crossover point to 0.51. Table 6 shows that the solution term is robust to revisions of the calibration: in seven cases the solution term is identical. As for the two cases (third and fifth row) in which the second path is different (d*LCO*L), the unique coverage for this path decreases to 0.125. Regarding the case where the second path is different (ninth row), this is because the revision of this fuzzy set score requires a huge change in the calibration. Generally speaking, Table 6 shows that the solution term is robust, but that the first path is more robust than the second. Changes in the calibration of the Danish case contribute to this fact.

Second, I change the consistency levels for truth table rows. With a consistency threshold of 0.88 (instead of 0.79), the solution turns into d*EP*LCO (coverage: 0.598, consistency: 0.876). Note, however, that in comparison with the solution displayed in Table 5, the number of uncovered cases increases to four and the solution coverage decreases sharply. If I change the consistency level to 0.82 (instead of 0.79), the solution term turns into d*EP*LCO + d*LCO*L (coverage: 0.722, consistency: 0.895). Even though the first path is similar, the second path is different. Compared with the solution term in Table 5, the number of uncovered cases increases to two and the solution coverage decreases. Furthermore, the unique coverage of both paths decreases (0.132 and 0.125 respectively). I prefer the solution displayed in Table 5 because more cases are covered by the solution term, and because the existing differences between Southern Europe and the Anglo-Saxon countries (together with Denmark) are clarified. Finally, it can be argued that dualisation is measured in this paper in a narrow way because it equates the literature on dualisation with the

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Table 6 – Robustness of solution term

<table>
<thead>
<tr>
<th>Recalibration</th>
<th>Solution term</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 YO: Finland from 0.38</td>
<td>d<em>EP</em>LCO + d<em>ep</em>L</td>
<td>Identical to solution term.</td>
</tr>
<tr>
<td>to 0.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 YO: Sweden from 0.52</td>
<td>d<em>EP</em>LCO + d<em>ep</em>L</td>
<td>Identical to solution term.</td>
</tr>
<tr>
<td>to 0.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 D: Denmark from 0.25</td>
<td>d<em>EP</em>LCO + d<em>LCO</em>L</td>
<td>Unique coverage of both terms drops to 0.132 and 0.125, respectively.</td>
</tr>
<tr>
<td>to 0.51</td>
<td></td>
<td>The solution coverage drops to 0.722. Denmark becomes an uncovered case.</td>
</tr>
<tr>
<td>4 D: Finland from 0.51</td>
<td>d<em>EP</em>LCO + d<em>ep</em>L</td>
<td>Identical to solution term.</td>
</tr>
<tr>
<td>to 0.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 EP: Denmark from 0.40</td>
<td>d<em>EP</em>LCO + d<em>LCO</em>L</td>
<td>Unique coverage of both terms drops to 0.132 and 0.125, respectively.</td>
</tr>
<tr>
<td>to 0.51</td>
<td></td>
<td>The solution coverage drops to 0.722. Denmark becomes an uncovered case.</td>
</tr>
<tr>
<td>6 EP: Sweden from 0.60</td>
<td>d<em>EP</em>LCO + d<em>ep</em>L</td>
<td>Identical to solution term.</td>
</tr>
<tr>
<td>to 0.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 LCO: Germany from 0.39</td>
<td>d<em>EP</em>LCO + d<em>ep</em>L</td>
<td>Identical to solution term.</td>
</tr>
<tr>
<td>to 0.51</td>
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</tr>
<tr>
<td>8 LCO: Ireland from 0.58</td>
<td>d<em>EP</em>LCO + d<em>ep</em>L</td>
<td>Identical to solution term.</td>
</tr>
<tr>
<td>to 0.49</td>
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<tr>
<td>9 L: Greece from 0.08</td>
<td>d<em>LCO</em>L + d<em>ep</em>L</td>
<td>This new calibration implies a huge change in the fuzzy set score for</td>
</tr>
<tr>
<td>to 0.51</td>
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<td>Greece.</td>
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<td>10 L: Sweden from 0.53</td>
<td>d<em>EP</em>LCO + d<em>ep</em>L</td>
<td>Identical to solution term.</td>
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<td>to 0.49</td>
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perspective of Palier and Thelen, ignoring the perspective of Rueda. I have decided to do so because I disagree with the assumptions in which Rueda relies to explain the process of dualisation (see section 2.1). Notwithstanding, to access the robustness of the analysis, I tested a different solution including five conditions instead of four. This new condition (D2) is based on the aggregate index of dualisation (Rueda, 2014: 390-391). With five conditions the solution term (complex solution) consists of two conjunctions: d*D2*EP*LCO + d*d2*ep*L (coverage: 0.881, consistency: 0.882). The first covers Italy, Portugal, Spain, and Greece, while the second covers Ireland, United Kingdom, and Denmark. Comparing with the solution term displayed in Table 5, the major difference is the presence of D2 in the first conjunction and its absence in the second. Thus, D2 follows a similar pattern to the condition high employment protection. Furthermore, the analysis of necessary conditions shows that D2 is not a necessary condition for the outcome. Overall, the introduction of D2 does not change the main results of the analysis.

4. CONCLUSIONS

This paper applied fsQCA to examine the determinants of outsidserness among young people. As mentioned earlier, the dualisation literature argues that the attempt to save the core manufacturing economy has been the structural driver of change, and emphasises the role of different welfare regimes to explain different degrees of dualisation. Although these scholars speak of the existence of different patterns of dualisation, they do not explain why in some countries it is mostly young labour market participants who are the outsiders.

To address this puzzle, I have argued that due to its rationalist-functionalist assumptions (namely because they draw on the VoC approach), dualisation scholars downplay conflict and overestimate cooperation. In my view, they ignore the contestative logic of some industrial relations systems, as well as the process of liberalisation. Furthermore, I argue that it is precisely the fact that some countries have seen an accelerated process of deindustrialisation that is contributing to high levels of outsidersness among young people. To overcome this problem, I argue that it is necessary to connect the dualisation literature with liberalisation theory, to highlight the differences in the system of industrial relations, and to emphasise the role of deindustrialisation on

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21 The aggregate index of dualisation is the ratio of employment protection for standard employment over active labour market policies (ALMP) generosity. To measure employment protection for standard employment I use data from 'OECD Indicators of Employment Protection' (OECD, 2013a). ALMP generosity is measured as the ratio of ALMP to GDP over the ratio of the unemployed to the labour force. The first indicator is taken from Armingeon et al. (2012), while the second is taken from OECD.Stat (unemployment is the harmonised rate, measured as a percentage of the civilian labour force). Data for the aggregate index of dualisation refers to 2010. As for the calibration of this condition, I consider that at least 2.5 on the indicator is required for full membership, at least 0.95 to be more in than out of the set, and 0.0 for full non-membership. The fuzzy set scores for this condition and the complete results are available from the author.
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explain growing labour market inequalities based on age. The results of the analysis support the hypotheses of the study. The analysis of necessary conditions points to the existence of two necessary conditions for the outcome of high levels of outsideness among young people: the absence of dualisation (d) and the combination of (i) low coordination in the industrial relations system and (ii) liberalisation (LCO+L). The analysis of sufficient conditions points to the existence of two possible paths for the outcome: the first combines the absence of dualisation, high employment protection, and low coordination in the industrial relations system, while the second combines the absence of dualisation, the absence of high employment protection, and liberalisation. The first path covers Portugal, Spain, Italy, and Greece, and the second path covers the United Kingdom, Ireland, and Denmark.

However, this study also has its limitations. The first concerns the Danish case, which is particularly striking. Even though Denmark is more in than out of the outcome set, it is more out than in with regard to the condition of low levels of coordination in the industrial relations system. Indeed, it is the only case (covered by the solution term) that combines coordination between labour and capital, and the outcome. Therefore, one needs to clarify what Denmark shares in common with the other countries with high levels of outsideness among young people. To clarify this, future research must analyse the Danish case in depth and contrast it with cases where the absence of dualisation and low employment protection are also contributing to the generational divide.

Second, this analysis has not examined whether high levels of outsideness among young people have consequences regarding differences in terms of access to social benefits. Future research must analyse whether labour market inequalities based on age are also translated into differences in terms of eligibility for social benefits.

Overall, this analysis points to two main conclusions. First, it illustrates the pitfalls of seeing institutions solely as guardians of efficiency. On the contrary, this paper shows how the historical institutionalist tradition, which emphasises the importance of power-distributonal struggles in understanding change in labour market institutions, can contribute to understanding the high levels of outsideness among young people (Thelen, 2010). As seen throughout this paper, it is conflict and the absence of dualisation, rather than the attempt to save the core manufacturing economy, that drives growing differences between age groups. Second, this analysis also illustrates how fruitful the use of fsQCA can be: in line with the hypotheses of this study, this analysis shows that no single condition is sufficient to explain the outcome.

22 To combine fsQCA with process tracing see Schneider and Rohlfing (2013) and Rohlfing and Schneider (2013).
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