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DEFENDING THE CORE?

An analysis of trade unions' behaviour towards outsourcing in the German chemical and metal sectors

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Introduction

One of the most significant tendencies in corporate organisation over the last three decades has been a tendency to vertical disintegration through outsourcing and subcontracting. Organisations both in the private and in the public sector have outsourced ever larger segments of their activities and increasingly focused on what they define as their core business (Bonazzi and Negrelli 2003, Marchington et al. 2005a, OECD 2004). This has given rise to complex inter-organisational relationship for the production of goods and services, that often extend over the boundaries of national countries, which have been variously named inter-organisational networks (Grimshaw and Rubery 2005), global value chains (Gereffi and Korzeniewicz 1994, Gereffi et al. 2005), and global production networks (Henderson et al. 2002).

Even though, as argued by Grimshaw and Rubery, the employment relations literature has largely neglected the issue of inter-organisational relations in shaping industrial and employment relations (Grimshaw and Rubery 2005: 1028), a growing range of literature has investigated the impact of these organisational transformations on working condition, industrial relations structures and trade union power (Flecker et al. 2008, Marchington et al. 2005b, Doellgast and Greer 2007, Kalleberg 2003). Recent studies have argued that the consequences of organisational restructuring on working conditions are not uniform, but are shaped by a variety of factors: Power relations between different organisations inside the value chain (Flecker et al. 2008); the bargaining position of particular groups of workers and their control over skills (Kalleberg 2003); the operation of different

Though the term is not always used with the same meaning, the basic definition of vertical disintegration for this research's purpose is "the creation of new intermediate markets in a previously integrated production process" (Jacobides 2005: 465). It entails a process whereby an organisation ceases to carry out internally various functions, and instead purchases the services or products concerned from outside parties. This may happen through the creation of autonomous subsidiaries or spin-offs within the same business group, contracting-out to other companies, or the use of agency work.

institutional regimes (Doellgast 2008, Doellgast et al. 2009a). Still, the vast majority of these analyses has highlighted a negative impact of these reorganisation processes on labour.

First, vertical disintegration usually entails the movement of jobs out of well organised sectors to more fragile and less powerful sectors. Indeed, one of the main motivators for outsourcing has been recognised in employers' attempts to exploit differentials between countries, sectors and workplaces (Flecker et al. 2008). This is particularly evident when organisations create subsidiaries applying different collective agreements. Vertical disintegration, thus, contributes to a deterioration of working condition in outsourced occupations, such as reduction of wages, work intensification, increased job insecurity and higher reliance on non-standard employment (Grimshaw and Rubery 2005, Wills 2009, Flecker and Meil 2010, Gautié and Schmitt 2010). Moreover, these processes produce an increased variation of working conditions along value chains, often with the situation of people working side by side having different employment conditions.

A second point regards the existence of power differentials among different nodes of the value chain. Indeed, vertical disintegration sets up competitive markets for the provision of goods and services, enabling firms at higher levels of the value chain to exploit competition between different suppliers or service providers to pressure for cost reduction (Appay 1998). Often suppliers pass down these cost reduction pressures to other organisations (a mechanism which is well described by the metaphor of cascade subcontracting, see Appay 1998) or to their own employees, producing a deterioration of wage levels, work intensification, and increased insecurity.

Lastly, these processes have important consequences for industrial relations structures and trade unions power (Doellgast and Greer 2007). Several authors have argued that vertical disintegration produces a weakening of workers' possibility to exercise their voice, especially at lower levels of the value chain (Marchington et al. 2005b). There are two reasons for this: first, suppliers and service providers are less likely to be covered by industrial relations institutions (both collective agreements and workplace representation) (Hendrix et al. 2003). Secondly, the same effectiveness of the bargaining process gets weaker moving

down the value chain: given the strong economic pressures that chain leaders exercise on its subsidiaries and sub-contractors, employers itself get less and less autonomous the lower the company is positioned in the value chain (Appay 1998, Perraudin et al. 2013), with the effect of rendering negotiations whit direct employers ineffective (Wills 2009). Even at higher levels of the value chain, however, processes of restructuring impact on social partners' bargaining position (Caprile 2000, Marchington et al. 2005b). The threat to outsource production to other organisations or other countries has been a strong managerial instrument to force concessions on the workforce and a key trigger of concession bargaining in advanced capitalist economies (Bronfenbrenner 2000, Flecker 2009). Finally, outsourcing and subcontracting affect trade unions' organisational resources. Vertical disintegration usually moves jobs out of large and towards small and medium enterprises, traditionally more difficult for unions to organise (Caprile 2000, Moore et al. 2007), and from unions' strongholds (manufacturing and the public sector) to private services, where they have much weaker bindings.

1.1. Trade unions in a dilemma?

Taken into account all the negative consequences vertical disintegration produces on working conditions, workers' bargaining power, and trade unions' organisational resources, it comes with no surprise that the relationship between trade unions and vertical disintegration has been portrayed at best as complicated (Pulignano 2005: 157). Unions have been said to be generally against these kind of processes (Bonazzi and Negrelli 2003: 9, Murray 1993, Anderson and Holmes 1995, Pulignano 2003: 202) and several contributions have analysed the strategies they have deployed in order to resist them and their varying degree of success (Doellgast 2008, Pulignano 2005).

However, a more recent strand of literature has somewhat complicated this picture. Stressing the differential effects that vertical disintegration processes have on workers located at different levels of the value chain, several authors have argued that opposition may not be the sole answer trade unions may adopt if confronted with employers' pressures for outsourcing and subcontracting. Indeed, scholars referring to the dualisation literature have argued that trade unions may accept this form of restructuring as a way to shelter core workers and let negative externalities of employers' search for flexibility and cost containment spill over to the outside (Palier and Thelen 2010, Hassel 2014). Thereby, trade unions have been considered as partially responsible for the fact that "vertical disintegration often results in a 'dualism' between a relatively stable core of secure workplaces and a slowly growing periphery of precarious and vulnerable jobs" (Holst 2014: 4).

The idea that outsourcing and subcontracting may pose trade unions in front of a dilemma was present in the literature since the mid Eighties (Goldthorpe 1984, Atkinson 1985). As far as 1984, Goldthorpe highlighted the presence of contrasting imperatives for trade unions in segmented labour markets (Goldthorpe 1984). Confronted with the threat of segmentation, he argues, trade unions may "strive to uphold class orientation, which must entail as far as possible opposing dualism – for example, by seeking legislation which can check employers' attempts to generate it and by regarding secondary workers, even if not union members, as still forming part of the unions' constituency; or (...) they [may] in effect accept dualism and fall back on the defence of the specific sectional interests of their enrolled members, in the hope that these interests may be then as much protected as undermined by dualism through the "shock absorber" function that the secondary-workforce performs" (Goldthorpe 1984: 149)".

By now, however, there are relatively few studies trying to systematically identify under which conditions do trade unions decide to adopt the one or the other strategy. This research will contribute to this debate by analysing trade union strategies towards vertical disintegration processes in the German chemical and metal sectors. We will trace which strategies have been adopted by trade unions in these two sectors since the 1990s, identify which interests they have given priority to and the reasons explaining their behaviour. We will argue that different factors influence trade unions' strategies, but two elements stand out as most significant: ideological legacies and members' interests, understood as the interplay between the internal and the external labour market and the effects it has on core workers.

This issue is particularly relevant for it intersects different debates currently taking place in the literature on industrial relations and comparative political economy.

First, by focusing on the role of trade unions in segmented labour market, this thesis contributes to discussions related to trade unions' position in our societies. Indeed, over the last decade, a strong debate has grown with regard to trade unions' role in processes of dualisation (for a review see Davidsson and Nakzyc 2009). Several authors have argued that trade unions have plaid an ambiguous role in the development of labour market dualisms and increased segmentation (Emmenegger et al. 2012: 310, Palier and Thelen 2010). Indeed, dualisation theorists have considered trade unions as "consenters" of these processes: Even though their preferred option would have been to resist employers' pressures towards dualisation, their weakness has pushed trade unions representing workers in core sectors in a defensive position. Thus, they have increasingly looked inwards and concentrated exclusively on their core members (Palier and Thelen 2010), allowing for organisational measures and reforms which have protected insiders, but negatively affected outsiders (Emmenegger et al. 2012: 310).

On the contrary, authors referring to the power-resource theory have argued that it has been the weakening of trade unions to have contributed to increasing market inequalities, because union weakness has impeded them to oppose employers' pushes to dualisation (Korpi 2006). In these accounts, employees representatives have been much less involved in liberalisation processes and have mostly came under employers' offensive (Streeck 2009). In some cases they have tried to resist employers' segmentation strategies by means of organising campaigns and collective bargaining targeted to the outsiders (Turner 2009, Benassi and Dorigatti in progress), but with mixed results.

These two different approaches have also important policy implications. If trade unions are blamed to increasingly represent solely the interests of the "better-off" among working people, "at the expense both of the common good and of other less privileged workers" (Pontusson 2013: 24), their role in society is strongly challenged. On the other hand, as Pontusson recently argued, if inequality comes out as a side-effect of trade unions' weakness, "any political project aspiring to redress the growth of inequalities in the OECD countries ought to promote

unionisation", since the sole trade unions do not have the resources to tackle the issues alone (Pontusson 2013: 24).

This research is relevant also for theoretical reasons. Indeed, a lively debate is currently going on regarding trajectories of change in contemporary political economies and most of all Continental coordinated market economies (CMEs) (Hassel 2014, Thelen 2012). The issue at hand is the nature of institutional change these countries are undergoing and which are the actors sustaining this change. On the one hand, there is an emerging stream of literature calling for redressing theories of comparative political economies, recognising the common neo-liberal trajectory undertaken by all advanced political economies (Baccaro and Howell 2011). According to liberalisation theorists, employers are increasingly departing from the post-war compromise between labour and capital and increasingly challenging its institutional configurations (Streeck 2013). In these accounts, what has been known under the label of "coordination" was not a product of employers' search for economic efficiency, but something imposed to capital agents by virtue of the countervailing power exercised by labour and the state. Thus, under changed power relationship, employers cannot be expected to pursue voluntary coordination with labour but will, as it is currently happening, escape from its institutional configurations (Streeck 2009). On the contrary, a large bulk of literature is arguing that, far from being dismissed, coordination between employers and workers is still central for the comparative advantage of CMEs. What has changed, is the capacity of these institutions (at least in continental political economies) to provide egalitarian outcomes for all the economy (Thelen 2012). According to these scholars, the old model is still fully in place in core sectors of CMEs, but at the expense of liberalisation at the margins (Palier and Thelen 2010, Hassel 2014). Understanding how trade unions behave under vertical disintegration is key for this debate, because vertical disintegration has been considered a crucial instrument to draw new (and more dualistic) equilibria. However, if distinctions between core and peripheral sectors, as I hypothesise, are far less stable than the dualisation literature suggests, and the periphery produces competition over the core, the hypothesis of a long lasting equilibrium between core and peripheral sectors will be strongly undermined.

1.2 Structure of the thesis

The thesis is structured as follows. The next chapter reviews the literature concerning trade unions' strategies in outsourcing processes. First, we identify which are the constituencies involved in processes of outsourcing. Secondly, we review the different responses given by trade unions when confronted with vertical disintegration and classify them on base of their inclusiveness. Lastly, we identify which factors have been considered relevant in order to explain trade union orientation. On the one hand, we present theories based on trade unions' attempt to defend their members. These theories are based on the presence or absence of competition between internal and external workers. Other theories, instead, have highlighted trade union ideology and trade unions' organisational interests as relevant variables for explaining trade unions' attitudes towards outsourcing. The literature review enables us to formulate the hypotheses guiding the empirical research, which will be sketched out in the concluding paragraph of this chapter, and to identify proper cases for the analysis, as explained in the next chapter.

Chapter 3 discusses the case selection and the methodology used for the analysis. The research focuses on the behaviour of trade unions in two core sectors of the German economy: the chemical and the metal sectors. Germany is a crucial case for debates on trade unions and labour market segmentation. This for two reasons: First, Germany belongs to the cluster of continental market economies, which have been said to be particularly affected by dualisation (Emmenegger et al. 2012). Moreover, German trade unions (especially those representing core manufacturing workers) have been said to be particularly concentrated on insiders, because their membership composition is skewed to this group of workers (Palier and Thelen 2010, Hassel 2014). Therefore, the German chemical and metal sectors are crucial cases for the dualisation literature. Moreover, the two sectors vary with regard to how outsourcing has taken place (concerning peripheral activities in the chemical and both peripheral and core activities in the metal sector) and trade unions' identities.

Since we are looking for identifying mechanisms driving trade unions to undertake more or less inclusive strategies towards non-core employees, we have chosen to rely on a case study methodology. Even though this method does not provide for the possibility to develop generalisations beyond the cases at hand, it is particularly well suited for shedding light on causal mechanisms. Data collection has been based on interviews with key informants (trade unionists, works councillors, employers and officials of employers' associations), the analysis of collective bargaining agreements and of secondary materials (like trade union newspapers, leaflets, etc.).

Chapter 4 and 5 present the empirical evidence. For each of the two sectors, we first present a sectoral analysis describing vertical disintegration patterns, their effects on working conditions across different workforce groups and the way these processes have been dealt with by industrial relation actors. Secondly, we concentrate on specific plant level case studies. We identify which functions are performed by external workers (through outsourcing or the use of agency workers) and how they relate with functions performed by core workers; we reconstruct pay structures between different workforce groups; we map how workers' representatives at plant level have dealt with the issue of vertical disintegration and whether and how it has been regulated, looking at the specific contents of regulation in order to identify the concerns and the motivations underlying the choices made by employees representatives.

Chapter 6 compares the two case studies. We show how both union identities and the presence or absence of competition between core and peripheral employees are important in order to understand the different approaches undertaken by workers' representatives in the chemical and metal sector with regard to the issue of external employment. Lastly, chapter 7 concludes highlighting the contribution of the study to the theories of industrial relations and comparative political economy.

Chapter two

Inclusion and exclusion in segmented labour markets

As we have highlighted in the introduction, the issue of which constituencies do trade unions represent has acquired a new relevance within debates on trade unions' role towards atypical and precarious workers. Before the rise of atypical employment, the claim of trade unions "to be *representative* of labour was rarely regarded sceptically" (Hyman 1992: 150). Surely, trade unions never represented all workers. This was evident both in terms of their agenda, which has (usually not explicitly) reflected the interests of specific segments of the workforce (Hyman 1994: 121), and of membership levels, which never reached the totality of the workforce (Regalia 2009: 43ff.). However, trade unions were generally considered as being the "genuine and legitimate intermediators of working-class interests" (Hyman 1992: 150).

On the contrary, today it is commonplace to find in the literature contributions highlighting the presence of diverging interests within the working class and arguing that trade unions tend to represent solely the interests of a specific segment of the workforce. Within the dualisation literature, the divide is usually set between so called insiders (i.e. workers in a stable employment relationship with good working conditions and career prospects) and outsiders (usually defined as the unemployed or precariously employed) (Schwander and Häusermann 2013, Rueda 2007²). Other authors (Palier and Thelen 2010, Thelen 2012, Hassel 2014), instead, have identified the insider/outsider divide with regard to different job prospects in different labour market segments. Indeed, they have identified a

Following the approach first developed by Lindbeck and Snower (1988) and extending it to include new forms of employment, these authors argue that the insider/outsider cleavage is "related to the unemployment vulnerability of different actors in the labour market" (Rueda 2007). Indeed, according to Rueda, "insiders (are) workers with highly protected jobs and outsiders (are) either unemployed or in jobs characterised by low levels of protection and employment rights, lower salaries, and precarious levels of benefits and social security regulations" (Rueda 2007: 2).

distinction between "core workers" belonging to the primary labour market (the insiders) and "peripheral workers" belonging to the secondary labour market (the outsiders)³. Still others identify different divides for defining insiders and outsiders, such as workers' ethnic origin (Emmenegger and Careja 2012) or gender (Kroos and Gottschall 2012). In all these cases trade unions are considered to represent the strongest part of the workforce (the insiders) at the expense of the weakest one (the outsiders), thereby strengthening, instead of mildering, labour market inequalities.

Trade unions' focus on insiders⁴ has been found to be differently strong in different institutional systems (Schwander and Haeusermann 2013), but it is held as a common feature in all advanced political economies. According to the dualisation literature, this is due to the fact that trade unions represent the interests of their current members, which are overwhelmingly represented among insiders (Rueda 2007, Palier and Thelen 2010). Still, this hypothesis is not able to account for examples of trade unions' attempts and efforts to include outsiders, especially in those cases where membership composition is strongly biased towards insiders. Indeed, several scholars have highlighted that trade unions' strategies are not always purely sectionalist or segmentalist (Clegg et al. 2010, Clegg 2012, Benassi and Dorigatti in progress, Turner 2009), but may have also inclusive orientations towards outsiders. How can we explain these inclusive strategies?

We argue that the dualisation literature has adopted a too narrow understanding of the relationship between trade unions' membership composition and their strategic

These authors rely on segmentation theories from the 1970s and early 1980s that have first pointed out the segmented nature of labour markets (Doeringer and Piore 1971, Berger and Piore 1980, Reich *et al.* 1973). According to these theories, the labour market is divided into a primary segment (or internal labour market), where jobs are characterised by "relatively high wages, good working conditions, chances of advancement, (...) and above all, employment stability" (Piore 1975: 126), and a secondary segment (or external labour market). The latter is characterised by unstable, dead-end jobs, with low wage levels and poor career prospects. Segmentation is produced by mechanisms – such as job ladders, ports of entry and training programs – which insulate the primary or internal labour market from the external labour market and protects it from market fluctuations. Thereby, "in the primary (...) market, wages and promotion are governed by administrative work rules rather than market allocation mechanisms, whereas the secondary (...) market follows the rules of perfectly competitive markets" (Davidsson and Nackzyc 2009: 3).

As other have noted, the terms "insiders" and "outsiders" are problematic with regard to their conceptual and empirical specifications (see Pontusson 2013). However, I am not interested here in a clear identification of the two groups within particular national contexts. In this work I will use those terms solely in order to refer to the debate which sees a divide between trade unions' traditional constituencies and other groups of workers which have been considered as marginalised in trade unions' agendas (Rueda 2007, Ichino 2006).

orientation, one that implies that trade unions' actions are solely determined by their current membership composition. On the contrary, other factors may play a role in determining which constituencies will be represented by trade unions.

In the following paragraphs, we will highlight how this debate unfolds in cases of vertical disintegration. First, we sketch out why do we talk about constituencies in the case of vertical disintegration, i.e. which are the different groups of workers involved and how they are affected by outsourcing and subcontracting. In the second paragraph, we conceptualise the issue of trade union inclusiveness, review the literature on trade unions' responses to vertical disintegration and categorise them with regard to their inclusiveness. The third paragraph presents arguments related to why trade unions are expected to adopt an inclusive exclusive orientation towards peripheral workforce groups.

Before proceeding, it is important to clarify that this discussion adopts an approach which sees trade unions' as strategic actors (Kochan et al. 1986), i.e. as actors capable of undertaking choices which are relevant for their present and future. Definitions of what constitute a trade union strategy have been various. In his classical book, Regini defines trade union strategies as "the bulk of the final solutions given to the dilemma of trade union action" (Regini 1981: 21). Similarly, Boxall and Haynes define a strategy as "a framework of critical enacted choices about the ends and means of an organisation" (Boxall and Haynes 1997: 567). This conception implies two important points. First, the idea that trade unions' behaviour is not the inevitable result of external factors, but that trade unions maintain a realm of autonomy in defining their behaviour. Indeed, even though trade unions do not operate in a vacuum, but within set external conditions which pose them challenges and offer them resources, the choices they make are not entirely determined by the external environment. On the contrary, these choices depend on decisions taken by the organisation in order to balance the costs and advantages of alternative options over trade unions goals and means (Zan 1992). Secondly, conceiving strategies as choices between and solutions to different dilemmas implies that they are never set once and for all (Regini 1981, Zan 1992). Indeed, strategies are only partial responses, which might be challenged and redefined as a consequence of changing circumstances.

Still, this approach does not conceive choices as implying rational calculations as

in the "rational choice" approach. Indeed, limits to the exercise of pure rationality are at hand, which derive from limited capabilities of actors involved in the choice, stickiness deriving from past choices and their legacy and the fact that these choices are framed within cultural and ideological lenses (Regini 1981: 32).

2.1. Of constituencies and outsourcing

In order to answer the question guiding this research, i.e. which constituencies do trade unions represent in cases of vertical disintegration, we have to examine the specific dilemma confronting trade unions in cases of outsourcing and subcontracting. A first issue we have to clarify is why do we talk about different constituencies in cases of outsourcing. Talking about constituencies, indeed, implies assuming the presence of different groups of people with different positions and interests. As already stressed in the introduction, the literature has generally highlighted the negative impact of vertical disintegration on labour (Doellgast and Greer 2007, Flecker et al. 2008). However, it has also been highlighted that the effects of these restructuring processes are different across different groups of workers. Outsourcing and subcontracting have, indeed, been associated with the fragmentation of employment relationships (Grimshaw et al. 2005), the strengthening of labour market segmentation and the emergence of organisational insiders and outsiders (Kalleberg 2003: 156) or of two-tier workforces (Marchington et al. 2005b: 283). But in what sense may one argue that vertical disintegration produces a segmentation in working condition and the division of the workforce between insiders and outsiders?

Several authors have argued that the differentiation of working conditions between different groups of workers and across different firms is implicit in the process of outsourcing. Indeed, outsourcing and subcontracting imply a redefinition of the boundaries of an organisation and produces the transfer of jobs from the internal to the external labour market (MacKenzie 2000: 708, Berger and Piore 1980). If these two segments were relatively homogeneous in terms of wages, working conditions

and trade union presence, this transfer would not produce significant consequences in terms of segmentation. However, organisational boundaries (as well as boundaries between countries or sectors) usually also define differentials in terms of employment conditions (Flecker 2009: 254) and the exploitation of these differentials "is one driving force behind restructuring" (Flecker 2009: 254, see also Doellgast and Greer 2007). Indeed, vertical disintegration is often "motivated by employers' interests of tapping into different market segments, where wages are at lower level" (Rubery 2007: 9). Indeed, jobs are usually transferred from a core of well organised firms to a periphery of poorly organised and poorly regulated firms, where wage levels and working conditions are much lower (Doellgast and Greer 2007) and trade unions weaker or unexistent. Furthermore, a part of the industries where these jobs are transferred (such as the industrial service industry, the call centre industry, etc.) have been established only recently and thus, often lack institutionalised systems of industrial relations, such as sectoral collective agreements or trade union presence (Doellgast 2009, Nicklich and Helfen 2013). In these cases, employment relations are governed by minimum requirements set by law and individual bargaining, since collective bargaining is not established (Caprile 2000, Doellgast 2012). Thus, "restructuring across the value chain makes use of, and simultaneously creates, segmented labour markets" (Flecker 2009: 253). In these cases, outsourcing and subcontracting produce a differentiation of working conditions between those workers who remain within the contracting out company and those who are transferred.

Regulation at European and national level partially protects transferred workers from a deterioration in wages and working conditions. The European Union directive on the transfer of undertakings, indeed, guarantees transferred workers the maintenance of their terms and conditions of employment in the event of a transfer of the undertaking in which they are employed (Caprile 2000). This directive aims at mitigating negative effects on workers and at limiting the possibility for employers to rely on outsourcing in order to redefine conditions of employment for their employees. Furthermore, it "partially prevent(s) the transfer from generating

Cost-cutting is the most important motivations behind outsourcing decisions (Young 2008). However, where other restructuring motivations prevail, such as it is often the case for IT services, outsourcing may not have the same negative consequences on employment as in the case of other business functions (Flecker 2009: 260).

inequalities between these workers and those that stay in the transferor company" (Caprile 2000). Still, the directive protects solely acquired rights, not preventing a differentiation in working conditions to develop over time (as a consequence, for example, of subsequent negotiations taking place in the original company). Furthermore, the protection of acquired rights may be limited in time (in several countries, such as Germany, for example, the guarantee is extended for solely one year, see Caprile 2000). Moreover, being conceptualised as the protection of acquired rights, this directive does not cover the remaining current or future workforce of the company where workers are transferred. As a consequence, employees working in the same company may underlie different terms and conditions of employment. As noted by Caprile, "by avoiding one form of fragmentation, another has been created" (Caprile 2000).

However, outsourcing and subcontracting may not imply the transfer of employees from a company to another, but simply the contracting out of jobs which will be taken up by new workers. Thus, this process does not produce, per se, a worsening of working conditions for the workers involved. Still, these forms of organisational restructuring may produce a deterioration in the terms and conditions of employment for functions once performed in-house and produce a growing bulk of poorly paid jobs. The issue of working conditions in the industries where work is transferred as a consequence of restructuring processes is another point in identifying the constituencies involved in vertical disintegration. Vertical disintegration processes such as outsourcing and subcontracting have, indeed, contributed to the growth of new low-wage sectors within advanced political economies (Gautié and Schmidt 2010, Wills 2009). As we have already noted, industries such as the catering, cleaning or logistics industry, which provide other industries with functions once performed in-house, show significantly worse employment conditions than contracting out industries. Moreover, value chain configurations may further strengthen these negative characteristics. The introduction of market-like mechanisms in place of hierarchical relationships (as produced by the reliance on contractors rather than the internal provision of functions) often increases the capacity of lead firms to extract lower prices from their suppliers (Appay 1998). This translates into lower profit margins for contractors, often passed down on the workforce in terms of lower-wages and more

precarious working conditions. Lastly, these configurations may undermine the possibility for workers to exercise their voice. This may happen not just as a consequence of a weaker trade union presence in these industries, but also of the triangular structure of the employment relationship within networks of clients and subcontractors, which disconnects workers from those who really determine their terms and conditions of employment (Marchington et al. 2005b: 239ff.).

Thus, two lines of demarcation seem to emerge from this analysis. A first one, between those workers remaining within the organisation and those who are transferred. And a second one, between workers coming from and/or remaining into the incumbent organisation and those employed by subcontractors. From the above reviewed literature, thus, we can derive the assumption that these groups of workers are likely to have different interests: Outsourced workers have the interest of maintaining their terms and conditions of employment and to be granted occupational security after being transferred. Subcontracted workers have the interests in good working conditions and avoiding the risk of losing their jobs at every new round of subcontracting (Méhaut et al. 2010: 339).

More ambiguous are the interests of workers remaining in the incumbent organisation. On the one hand, vertical disintegration may question the employment security of workers employed in contracting out companies and may weaken their bargaining power by producing pressures for concessions (Flecker 2009: 251). This should give rise to a negative attitude of internal workers towards outsourcing. On the other hand, however, outsourcing may also be used in order to shelter core employees and their employment conditions. This may take place in an indirect or direct manner. Outsourcing has sometimes been considered as an instrument for bypassing existing restrictions or rigidities in the internal labour market. Indeed, the strength of a specific workforce and the rigidities imposed by its collective action (such as, for example, with regard to limitations on work in unsocial hours or in flexibility demands) has often had the unintended consequence of employers' searching for alternative routes to achieve their goals (Berger and Piore 1980). Thus, the use of external workers may be an instrument for bypassing resistance among the internal workforce without entering into an explicit counterposition over specific issues. The unwillingness of the core workforce to accept concessions may, thus, indirectly produce negative consequences on other groups of workers, by resulting in the creation of a bulk of workers who have to undertake what the internal workforce refuses to do (Ballarino 2005: 180). However, this clash of interests may also take place more directly, as a way to protect core workers. In these cases, outsourcing may explicitly enter negotiations between workers and managers and be used as "bargaining chip". Indeed, outsourcing may be conceived as an alternative to concessions that would directly affect the pay and working conditions of the internal workforce or as instrument to enhance their job security by constructing an external buffer to cope with market fluctuation (Doellgast and Greer 2007: 63).

Thus, the interrelationship existing between these workforce segments points not only towards the existence of different interest constellations among these workforce segments, but also of possible interest conflicts. Do trade unions reconcile these different interests or do they give priority to one specific group?

This question is further complicated by the fact that outsourcing and subcontracting often crosses the boundaries of trade union representation. As it is well known, trade unions in Western Europe have historically organised around the principle of industrial unionism, according to which all workers within an industry are organised by a trade union, independently from their status or occupational differences (Visser 2012). Accordingly, the organising principle of industrial unions has been "one company, one trade union". By moving jobs across industrial boundaries and giving rise to multi-enterprise settings where employers belonging to different sectors coexist, however, outsourcing strongly questions this principle. Thus, the three above mentioned constituencies may fall under the representation domain different trade unions. As other have noted, this fact does not in principle imply any problem for the representation of workers' interests (Doellgast and Greer 2007). However, as we have seen, this is often not the case, since both trade union presence and its effectiveness worsen moving down the value chain (Appay 1998). Outsourcing, thus, may translate into the fragmentation of employees' possibilities to exercise their voice (Marchington et al. 2005b: 239ff.). A lack of intervention on behalf of trade unions representing sectors where firms subcontract part of their activities over workers employed by subcontractors may, thus, reflect not so much distinct representation domains, but a (more or less explicit) exclusive attitude towards those workers.

2.2. What do trade unions do under vertical disintegration?

From the literature we have reviewed in the previous paragraph, we can identify three different constituencies affected by vertical disintegration processes: workers remaining in the incumbent organisation, workers transferred from the incumbent to the subcontractor and workers employed by subcontractors. We have now to turn to the central question of our research: who is represented by trade unions? How can we categorise trade unions' strategies in terms of their inclusiveness?

In order to understand this problem, we have to clarify two issues. First, we have to conceptualise what does it mean for trade unions to be inclusive. Second, we have to review the possible answers given by trade unions to vertical disintegration processes and categorise them with regard to their inclusiveness.

It is important to notice, in order to assess unions' inclusiveness, that initiatives aimed at tackling the effects of outsourcing and the problems that new interorganisational relationship produce on labour may be undertaken not just at the top of the value chain, but also at the bottom. Indeed, initiatives to improve working conditions at subcontractors have been organised by trade unions representing workers in subcontracted sectors, such as cleaning or catering⁶ (Wills 2009). Still, since we are interested in the relationship between organisational restructuring and trade unions' inclusiveness, it is important to look at trade unions' strategies at the top of the value chain, i.e. where outsourcing takes place and trade unions have the possibility to influence its outcomes. The fact that other unions may take up the issue of regulation when outsourcing has already taken place and its effects have displaced over workers, indeed, does not change the inclusive or exclusive attitudes of trade unions representing core workers.

Some of these campaigns, such as the Justice for Janitors campaign of the American Service Employees International Union in the janitorial industry, have become paramount examples of trade union innovative initiatives in low-wage sectors (Savage 2006, Waldinger et al. 1998). They have acquired particular evidence because they have targeted contractors, rather than direct employers, pointing out the need for labour to move collective bargaining targets in accordance with predominant modes of organisation of inter-firm relations and new contracting systems. Furthermore, they have highlighted labours' need to ally with other actors in order to build power in those industries where workers are less powerful on the labour market (Wills 2009).

2.2.1. How can we measure inclusiveness?

The issue of inclusion and exclusion in trade unions' behaviour towards specific groups of employees has usually been dealt with by looking at their organisation level. Differentials in the propensity of trade unions to include different groups of workers within their representation realms are, indeed, usually measured by focusing on density levels of the respective groups (Ebbinghaus et al. 2008, Davidsson and Nackzyc 2009: 5). Thus, for example, Ebbinghaus et al. argue that "the unionisation level as the share of employees that belong to a trade union, is an important indicator of the inclusion and exclusion of interest groups (....) into the system of trade union representation" (Ebbinghaus et al. 2008: 1).

However, this measure has often been considered inappropriate (Regalia 2009: 47ff., Benassi and Vlandas 2013). First, trade union membership and its representation capacity do not coincide (Regalia 2009: 47ff.). As Regalia has argued, membership levels "do not indicate so much trade unions' capacity to represent, but workers' propensity or interest in joining a trade union" (Regalia 2009: 47). Thus, density levels may reflect different selective incentives for joining a trade union and not so much the fact that a trade union includes a workers' group into its representation domain.

Second, the extent to which unions can influence wages and working conditions of specific workforce groups does not only depend on union membership. The classic example is the French one, where trade unions organise less than 10% of the workforce, but their collective agreements affect the terms and conditions of employment of around 90% of dependent workers through institutional extension mechanisms (Visser 2006: 46). Thus, trade unions might perform functions for specific groups of employees even if they are not members of the union. Viceversa, even within a trade union membership, there might be constituencies which receive a higher priority, while other might be subordinated or disregarded (Hyman 1994). Moreover, since outsourcing often entails a crossing of the boundaries of trade unions' organisational domains, it might be the case that a specific union cannot organise a particular group of the workforce. Still, it might operate in a manner to influence its working conditions in a positive or negative way.

Therefore, rather than looking at the membership indicator, it might be more useful to look at other dimensions for understanding trade unions' inclusiveness towards

specific groups of the workforce. A model in this sense is Heery's typology of different union strategies towards contingent workers. Heery defines unions inclusiveness as the sum of three different dimensions: internal representation, external representation and legitimacy of interests (Heery 2009: 431). The first one, internal representation, is the closest to the traditional membership dimension, but it analyses contingent workers' participation possibilities in a more detailed manner. Indeed, internal representation focuses on membership rules and organisational arrangements for defining contingent workers' participation in a union's governance and life (Heery 2009: 430). External representation, instead, concentrates on a union's collective bargaining strategy, its use of legal instruments and other attempts to regulate the employment relationship of contingent workers (Heery 2009: 430). Lastly, the latter dimension focuses on trade unions' recognition of contingent workers' specific interests and the legitimacy accorded to them (Heery 2009: 430). With regard to our specific research question, it is the second dimension, as we will see, to be of particular relevance.

2.2.2. Different responses to vertical disintegration?

It is useful, now, to review what previous studies have identified as trade unions' possible responses in cases of vertical disintegration. I have grouped possible answers into six broad categories: inaction or acceptance of outsourcing, ban on outsourcing, development of alternative measures, defence of employment levels and working conditions in cases of transfer of undertakings, extension of regulation, and organising. Of course, these answers are not mutually exclusive and more than one strategy can be deployed at the same time.

Inaction or accepting outsourcing

Employees' representatives can respond to vertical disintegration processes both in a passive and in an active manner. A first possible answer highlighted by the literature is, thus, inaction. Indeed, a large bulk literature concerned with organisational restructuring has argued that the influence of trade unions over managerial restructuring decisions is strongly limited (Behrens and Kaedtler 2008, Caprile 2000, Meil et al. 2009). Indeed, employees' rights to influence managerial decisions with regard to vertical disintegration processes are very narrow, since matters such as subcontracting and outsourcing often fall into the realm of managerial freedom (Caprile 2000). Moreover, one can find no responses in cases where employees' representation is too weak or non existent (Meil et al. 2009: 68). Inaction, can, however, also have an active dimension. In some cases, indeed, this attitude may derive not so much from a lack of power, but hide an exclusive orientation of workers' representatives, one which is concentrated exclusively on the defence of core workers. Indeed, outsourcing might be accepted (and thus require no intervention on behalf of workers' representatives) as an instrument for avoiding concessions for the core workforce. As argued by Doellgast and Greer, for example, works councils' response to employers pressures for cost containment at Vodafone was to accept the outsourcing of seasonal peaks to cheaper external vendors (Doellgast and Greer 2007: 63). Similarly, under pressure of the economic crisis that affected the industry, the Finnish Paper Workers' Union accepted the outsourcing of cleaning activities in order to retain competitiveness of paper plants without entering into discussions over the terms of employment of production workers (Jonker-Hoffren 2011: 382). Often, such a strategy comes together with an assurance on behalf of employers on investment or employment volumes, or job security for the core workforce (Palier and Thelen 2010).

At the base of active reactions to vertical disintegration is often the negotiation (sometimes not even connected to specific outsourcing processes) of more or less detailed information and consultation rights. They often constitute a prerequisite of employees' representatives' engagement and involvement into outsourcing decisions. Thus, several collective agreements entail provisions ensuring a timing information of workers' representatives in cases of outsourcing (Jalette and Warrian 2002).

Restricting outsourcing

In some cases, unions have tried to adopt strategies to restrict outsourcing. Sometimes this has taken place through mobilisation strategies (Pulignano and Stewart 2013), which, in some cases, have involved the adoption of innovative forms of action. Foster and Scott, for example, account of the adoption of social movement style tactics to counter outsourcing in the public sector in the US and the construction of alliances with consumers (Foster and Scott 1998).

In other cases, a ban on outsourcing has been introduced into collective agreements. Rarely however, a complete outsourcing ban has been negotiated. More often, trade unions have bargained non-outsourcing clauses for some segments of the production process, usually work currently or historically performed by internal employees or which is very close to their tasks (Jalette and Warrian 2002: 68, Pulignano 2005: 150). For example, the collective agreement of the Italian metal sector impedes employers to outsource core functions and ordinary maintenance of plant facilities (Pulignano 2005: 160, Izzi 2010). In Canada, the Canadian Auto Workers developed the concept of "work ownership" according to which "work we had done historically belonged to us and could no longer be unilaterally outsourced by management" (CAW 1996, cit. in Holmes 2004: 16). This idea radically changed traditional union/management relationship, since it questioned management's right to manage, one of the landmarks of the American Fordist compromise.

In other cases, restrictions on outsourcing have been placed in order to limit outsourcing to specific circumstances (such as production peaks, and personnel or skill deficit) or to specific procedures (with, for example, a managerial obligations to inform workers' representatives in due time of an outsourcing decision) (Jalette and Warrian 2002: 68).

Developing alternative measures

Another option has been for workers representatives to get involved into managerial decisions by developing alternative options to proposed outsourcing plans. This strategy entails that workers' representatives challenge management on its own terrain, namely that of economic efficiency. Indeed, this strategic approach to outsourcing entails that trade unions "engage in negotiations on strategic decisions regarding work and company organisation, products and markets" (Haipeter 2013: 46), rather than just dealing with the social consequences of

organisational restructuring. The key backdrop of this strategy is that employers have multiple roads for being competitive and that not always the one proposed by the management is the most effective. Indeed, while outsourcing is generally based on a cost-cutting approach, employees' led alternatives tend to emphasise the "high road" options for a company's competitiveness, proposing organisational innovations which make in-house production economically superior to outsourcing and offshoring.

One case in point is the IG Metall "Better not cheaper" campaign developed in 2004 in the district of Nordrhein-Westfahlen and since then on developed at national level. In this case, the union has developed specific projects, largely founded by the regional or federal government, for assisting plant level representatives in their activities. These initiatives aimed at developing skills and competence in economic matters through workshops and branch research, the construction of networks of union-oriented consultants and academics, the identification and dissemination of best-practices (Haipeter 2013: 46). Alternative proposals often regarded organisational innovations, rarely process or product innovation. They ranged from productivity programs, new wage structures, decentralisation in the organisation decision making process and the introduction of teamwork (Haipeter 2013: 50).

In other cases, the development of alternative solutions has gone together with trade unions' and workers representatives' acceptance of concessions. In this cases, employees' representatives try to affect managerial sourcing decisions by accepting "means of change which reduce costs or improve revenues" (Helper 1990: 94) or by granting concessions on wages or other terms of employment that reduce the cost and flexibility differences between in-house and third-party workers (Doellgast and Greer 2007: 64). These strategies are geared towards the willingness to avoid outsourcing or to bring work back in-house. In how far, however, that these options constitute alternative solutions or the simple result of a loss of bargaining power is strongly questionable.

Defending employment levels and working conditions

Another strategy has been geared towards the goal of defending working conditions

of outsourced workers, by maintaining unchanged previous employment conditions (Helper 1990, Meil et al. 2009: 68). In this case, unions accept outsourcing and negotiate on the effects of restructuring measures on workers. This strategy is quite common in cases of transfer of undertakings, as an instrument to protect former workers of the subcontracting company (Caprile 2000). As we have seen, this strategy may produce new forms of fragmentation, since it concentrates on the maintenance of terms and conditions for transferred workers, independently from the employment conditions of other workers employed in the new company (Meil et al. 2009: 68).

Employment security might involve the construction of specific organisational structures where redundant employees might be employed. These structures, like the Job Opportunity Bank-Security (JOBS) Program negotiated by the United Auto Workers (UAW) during restructuring at the so called "Big Three" (Helper 1990: 93ff.), aim at ensuring employment levels, while at the same time allowing employers a flexible management of the workforce. During the phase of massive restructuring undertaken by the biggest American automakers, the UAW negotiated an initial "secured employment level", whereby all workers with more than a year job seniority could not be laid off. Workers which were no more directly needed in production were placed in the JOBS Bank at full pay and with no loss of seniority. Employees in the JOBS Bank might receive training, substitute for workers on leave or be assigned to other tasks (Helper 1990: 93).

Extending regulation

More difficult is for trade unions to maintain working conditions when vertical disintegration does not derive from the transfer of internal employees to the outside, but from new inter-organisational contracting agreements. In these cases, no legal provisions are available for guaranteeing terms and conditions of employment.

In some cases, trade unions have tried to extend collective agreements and representation structures to subcontractors (Doellgast and Greer 2007: 64). Sometimes, trade unions have introduced provisions in their sectoral collective agreements, setting the obligation for the management to contract work out solely

to companies applying a collective agreement (of the same or other branches) (Jalette and Warrian 2002: 69). This, for example, is the case of the national collective agreement of the metalworkers industry in Italy, which sets that subcontractors have to apply the collective agreement of the respective branch. In other cases, extension mechanisms have been bargained at plant level through agreements that protect working conditions for outsourced workers by enlarging the field of application of collective agreements. At Fiat, workers' representatives have extended the application of the metalworkers' collective agreement and other collective agreements regulating employment conditions for Fiat employees to the subcontractors (Pulignano 2005: 167). In Canada, the Canadian Auto Workers developed the new collective bargaining concept of "satellite bargaining", whereby the union has negotiated a clause which extends collective bargaining provisions of the main company to subcontractors "as if they were part of the same company" (Holmes 2004: 17). The representation domain of the union was, thus, shifted "from the legal entity of the company, to a definition based on the structure of integrated production" (Holmes 2004: 17). In this sense, thus, the union's response to outsourcing was to redefine the scale at which collective bargaining takes place, following the redefinition of how production is organised. In other cases, trade unions have influenced the allocation of work by ensuring that work was subcontracted to unionised companies (MacKenzie 2009: 550, Grimshaw et al. 2005: 283).

Other contributions have pointed out that trade unions have struggled to "safeguard the effectiveness of trade union representation" (Pulignano 2005: 168) by developing structures of representation extending over multiple employers. At Fiat, for example, the outsourcing of some service functions to external companies and the growth of in-house outsourcing was accompanied with the definition of an horizontal representation structure (a "site committe", *comitato di sito*) ensuring coordination among workers employed by the main company and those employed by suppliers (Pulignano 2005: 168). This structure identified "the production unit as the main basis for collective action" (Pulignano 2005: 168) and collective representation. Similar is the case of Iveco (a truck manufacturer belonging to the Fiat group), where workers' representatives bargained the introduction of a specific structure for representing all workers on the site, irrespectively from their legal

employer (Piotto 2001). These examples constitute instances of trade unions attempts to adapt the structures of collective bargaining and interest representation to companies' new inter-organisational relationships. In all these cases, employees' representatives exploit the bargaining strength of workers located at the top of the value chain in order to influence working conditions and employees' possibility to exercise their voice at the bottom of the value chain.

Organising

Another response undertaken by workers' representatives in core sectors has been to start organising drives in order to recruit workers in supplier companies and to regulate their working conditions (Holmes 2004: 17ff., Doellgast and Greer 2007: 69, Rutherford and Gerteler 2002: 210). In some cases unions have exploited their power position in core firms in order to facilitate these organising drives by bargaining favourable agreements with lead firms in the form of code of conducts (Holmes 2004: 17). In several cases these agreements have set an explicit obligation on behalf of core firms to require that their supplier have "responsible labour relations" and recognise trade unions (CAW 1996, cit. in Holmes 2004: 17) in order to enter a contracting relationship (see also Rutherford and Gertler 2002: 201). This meant ensuring neutrality, basic workers' rights and successors rights in cases of change of ownership. According to Holmes, core firms' acceptance to introduce such clauses in sub-contracting agreements has been facilitated by employers' willingness to prevent disruptions caused by labour conflicts within value chains organised on just-in-time principles (Holmes 2004: 17).

Sometimes, the effort to organise subcontractors has triggered cooperation between unions representing different sectors, but in other cases this has opened up problems of competition, with different unions claiming responsibility over the same company. In some cases, these problems have been overcome by horizontal trade unions' structures (the national or local confederations), which have acquired a new role in collective bargaining. This has happened not just in cases, such as the Italian one, where horizontal structures have historically played a crucial role in the definition of trade unions' bargaining agendas, but also in those institutional settings where vertical unions have traditionally played an overarching role. A case

in point, for example, is the German one. In order to regulate the temporary agency sector, which crosses sectoral and trade union representation boundaries, the unions belonging to the German Confederation of Trade Unions (*Deutscher Gewerkschaftsbund*, DGB) have set up a bargaining commission composed by representatives of all DGB unions and led by the central confederation, which is in charge of negotiating a collective agreement for the sector (Vitols 2008: 197ff.). This is an unicum in the history of the German industrial relations, because the DGB has never had competences in collective bargaining, which was reserved to industrial unions (Dribbusch and Birke 2012).

2.2.3. Defining inclusiveness in cases of outsourcing

It is useful now to look at the above mentioned strategies in terms of their inclusiveness towards different constituencies. As we have highlighted in the previous paragraph, three are the groups usually involved in outsourcing: workers in the core firm which remain in the organisation, transferred employees and employees of subcontractors/other organisations. As we have seen, what is at hand in processes of outsourcing (and might be regulated by trade unions) is the segmentation of working conditions between different groups of workers and the weakening of institutions for the representation of employees.

Thu, we can argue that, in this case, inclusiveness refers to two dimensions: the broadness of trade unions' strategies towards outsourcing and the resulting level of segmentation in wages and working conditions. As for the first dimension, the issue relates to who is included into the union constituency, i.e. whether trade unions strategies direct solely to core workers remaining in the firm (for example by bargaining provisions avoiding negative consequences of outsourcing for this group of workers), whether they cover transferred workers (for example by defending employment levels and working conditions during the transfer) or whether they extend to the outside of the organisation by following new organisational configurations (such as in the cases of unions organising suppliers or constructing new structures of representation). The second dimension relates, instead, to the effects of this inclusion, i.e. whether trade unions' intervention

produces homogeneous or segmented working conditions between the three different workforce groups. Here, the possible options may be ranged on a continuum from full parity (or higher wages) to lower ones. Internal differentiations range from different provisions set by the same union (such as in the case of concessions for avoiding outsourcing) to the adoption of another collective agreement until the lack of any collective regulation. Usually these two dimensions move together, with more inclusive strategies usually resulting in lower segmentation.

Looking at the above mentioned responses, one can clearly see that some of them refer to the inside of the firm, while others to the outside. Indeed, the ban on outsourcing, the defence of employment levels, in-sourcing strategies all aim at protecting internal employees from the negative consequences of outsourcing. On the contrary, the definition of extension mechanisms for collective agreements and representation structures and strategies aimed at organising subcontractors refer to the outside of the firm. Indeed, they identify mechanisms to regulate working conditions of external employees and, thereby, to influence the external consequences of outsourcing.

Expectations over the kind of strategies developed by trade unions have looked at which are the prioritised constituencies. In the next paragraph, we will analyse which factors have been considered important in order to explain the one or the other inclination

2.3. Why are trade unions inclusive or not?

We have now to clarify the reasons why do trade unions define their constituencies in a broader or narrower manner. In order to disentangle how do trade unions set their boundaries, we have, first, to examine what are the ends and means of trade unions. This means examining one of the crucial questions in the research on labour movements, namely what are trade unions for?

2.3.1. Defending members' interests

Being representative organisation freely constituted by workers, the first response to this question would be "to represent their members' interests" (Flanders 1970). The focus on members' interests is the common departure of several current debates looking at the relationship between trade unions' strategies and their membership composition. According to the dualisation literature, "unions protect their members against employer demands while ignoring the interests of nonmembers" (Davidsson and Emmenegger 2013: 340). Thus, trade unions' strategies reflect the interests of the "median union member" (Baccaro 2008: 4). According to this literature stream, trade unions' focus on the defence of their members' interests has progressively diminished their capacity to represent the working class as a whole and produced the exclusion of some workforce groups (typically young workers, workers in non-standard forms of employment, women and migrant workers) from their representation domain (Rueda 2007). This tendency towards a more exclusive representation is caused by two parallel developments. First, a progressive disarticulation and differentiation of interests within the working class, with a polarisation between the interests of insiders and those of outsiders. Secondly, the concentration of trade union membership in specific workforce segments, usually the relatively better off (see Pontusson 2013, Iversen and Soskice 2009, Baccaro 2008). With the large bulk of trade union members progressively distancing from non-members in terms of economic position and, thus, material interests, this is the argument advanced by the dualisation literature, trade unions have started to represent less and less the totality of the working class and have become the representatives of a modern aristocracy of labour (Pontusson 2013: 23) made up of workers in stable employment relationships.

A milder version of this explanation introduces the issue of the external context in order to account for unions' exclusionary attitudes. According to several authors, the latter are to be conceived as "second-best solutions" (Davidsson and

This is why this literature expects more encompassing trade unions (such as those belonging to the Scandinavian cluster, see Ebbinghaus 2006) to adopt more inclusive strategies. Since these trade unions also organise outsiders, they have to reconcile insider and outsider interests within their agenda and, thus, adopt more solidaristic bargaining policies (Davidsson and Emmenegger 2013: 344). Obinger et al, for example, argue that "encompassing labour organisations transcend particular interests and thus have an incentive to speak on behalf of outsiders" (Obinger et al. 2011: 177).

Emmenegger 2012: 339) in a situation where trade unions are unable to continue their function as representatives of general workers' interests. Declining union power and a situation of both economic and political pressure have exacerbated "tendencies of social closure on the part of the well-organised" (Hyman 1992: 152) and strengthened the appeal of particularistic solutions. Being unable to give an adequate response to all interests, trade unions came to prioritise their core constituency, defending their acquired rights and letting outsiders bear the negative costs of adjustment (Palier and Thelen 2010, Hassel 2014). Still, the reasoning is quite similar and based on the same premises: interests between core and peripheral workers are diverging and unions prioritise the former because they constitute the large bulk of their members.

With regard to the specific issue at hand, namely the behaviour adopted by trade unions in core sectors when confronted with outsourcing, this literature predicts trade unions to concentrate on the interests of core workers (usually located in large manufacturing firms and in the public sector). According to these scholars, pressured by employers' requests for reducing production costs and increasing flexibility in tighter international markets, trade unions in core sectors have accepted managerial strategies for cost-cutting and flexibility enhancing at the periphery of the labour market, via outsourcing and the use of non-standard forms of employment. Thereby, they have allowed the growth of a bulk of peripheral (and poorly paid) jobs in private services, which have to bear all the negative costs of employers' flexibility and cost-cutting requests⁸ (Palier and Thelen 2010, Hassel 2014). Indeed, according to Hassel, firms in core sectors have "actively pursued a strategy of separation of the workforce, which divided employees into core and fringe workers" (Hassel 2014: 3). This has taken place with the consent of workers' representatives in core plants, which accepted these measures in a scramble to secure the competitiveness of their companies (and, thereby, their members'

This hypothesis has been borrowed by labour market segmentation theories first advanced in the 1970s and 1980s (Palier and Thelen 2010: 120). According to Berger and Piore, for example, employers' attempts to respond to the uncertainties emanating from the market or, in some cases, the upsurge in labour militancy may produce the segmentation of the labour market into a primary and a secondary segment (Berger and Piore 1980). By moving jobs out of the highly regulated primary sector to the secondary one employers attempt to escape from the rigidities of internal labour markets and to gain more flexibility (Berger and Piore 1980). This has taken place through various mechanisms of organisational restructuring, such as the outsourcing of some segments of the production process to small, union-free enterprises, the use of self-employed labour, etc.

workplaces) without endangering their working conditions. This has contributed to widen the gap between a core of manufacturing companies where wages and working conditions are still good and a periphery of dead-end jobs in the private service sector⁹.

This account rests on two crucial assumptions: first, segmentation strategies are sustained by a commonality of interests between core workers and their employers in a context of labour weakness; secondly, these strategies are supposed to benefit core workers because the primary and the secondary labour market are clearly separated and do not compete with each other.

The first point suggests that segmentation is based on a cross-class coalition between labour and capital in core sectors of advanced political economies (Thelen 2012). According to this approach, these alliances benefit both parties, since core workers and their employers have a common interest in their companies' competitiveness. Indeed, segmentation strategies allow employers to ensure both cost-cutting and the sustained commitment from a workforce whose skills are crucial for the production processes¹⁰. Trade unions, instead, may look at segmentation strategies as a way to ensure a company's competitiveness without having to enter compromises on core workers' conditions of employment and to buffer them from market fluctuations. As a consequence of changed bargaining power between labour and capital, thus, trade unions may be willing to abandon

Indeed, as argued by Hassel, "one important component of concession bargaining was the increasing gap between core and peripheral workers through the outsourcing process. Collective agreements were adjusted accordingly, in particular by transferring service components into other collective agreements and lower pay. (...) Terms and conditions for workers in the service components of manufacturing firms drastically worsened, because their pay scales shifted from metal or chemical sector pay to service sector pay" (Hassel 2014: 9).

This idea was first advanced by Atkinson in its flexible firm model. Indeed, according to Atkinson, the segmentation of a company's workforce into core and peripheral segments is a consequence of different flexibility needs. Core workers provide companies with functional flexibility, since they posses those skills which are crucial to the company's competitiveness. The peripheral workforce, instead, provides organisations with numerical flexibility which allows companies to adapt their workforce to market fluctuations. Peripheral workers are employed in activities that do not require high skills. This secondary workforce is divided into different segments, internal and external to the company (Atkinson 1985: 16). Among the former are parttimers and workers in short-term contracts, while among the latter are workers employed by subcontractors, self-employed workers and temporary agency workers (Atkinson 1985: 16). According to Atkinson, thus, the segmentation of a company's workforce into core and peripheral segments allows firms to fidelise human resources in a cheaper manner, by focusing fidelisation just on workers employed in high-skill activities, which are central to a company's competitiveness, and utilising the periphery to compress production costs. Moreover, peripheral workers also contribute to secure core workers employment, by buffering core employees from fluctuations in the labour market (Osterman 1994: 184; Atkinson 1985).

solidaristic, inclusive strategies for the defence of all workers (as they have historically done, at least in European countries, and as it would be their preferred option) and concentrate on core workers¹¹.

The expression of these egoistic tendencies may be facilitated by the very same institutions that in other contexts have sustained centralised coordination and solidaristic policies (Doellgast 2012). Indeed, the presence of institutions which grant workers influence at plant level, such as works councils, might facilitate the expression of "local egoism" (Palier and Thelen 2010: 123, Martinez Lucio and Weston 1995: 237). In countries where workers' interest representation is based on a dual system (such as the German one, as we will see later on), this might produce a distancing between trade unions and works councils and the predominance of the latter over the former. Since works councils are closer to the immediate, material interests of core workers, firm-specific concerns may acquire predominance over more solidaristic attitudes.

The reason why these strategies may be beneficial for core workers rests on the second crucial assumption of this strand of literature. According to these scholars, indeed, there is a clear segmentation between core and peripheral segments of the workforce. Indeed, core and peripheral workers are not allowed to compete with each other, since they belong to two separated segments of the economy, which differ in terms of occupations and skills. As argued by Emmenegger et al. "outsiders are not competing directly with the insiders for jobs, income, and social rights: outsiders do not have the same occupations, usually do not work in the same economic sectors (male blue-collar workers, e.g., are not outsiders in Continental Europe), they do not have the same skills, and they sometimes lack citizenship (...). Put differently, outsiders do not work in the same jobs for less money, they work in different jobs" (Emmenegger et al. 2012: 220). Thus, outsiders cannot put pressure over insiders' terms of employment and compromise their wages and

The idea that, in cases of economic pressures, workers may abandon solidaristic attitudes based on the ideal of working class solidarity and pursue alliances with their employers was already advanced in the mid Eighties by authors discussing the impact of the economic crisis over neocorporatist institutions. According to Streeck, for example, neo-corporatist strategies, aimed at homogeneous regulations at national or sectoral level may be questioned by stronger members pushing to the abandonment of solidaristic policies in what he has defined *Betriebsegoismus* (company egoism) (Streeck 1984). Indeed, "the effect of the crisis on organised labour is essentially that of making it more difficult to transform particular economic interests into general class interests (Streeck 1984: 340)". Accordingly, workers' interests in the survival of their workplace may be stronger than their commitment to ideals of solidarity (Streeck 1984: 341).

working conditions (Palier and Thelen 2010: 122).

2.3.2. Looking at alternative explanations

The dualisation approach surely highlights a crucial point in trade unions' strategy formation. Indeed, as other have written, density levels influence the process of selection and aggregation of demands and, thus, trade unions' strategies and bargaining policies (Regalia 2009: 49). As we have argued, however, these approaches disregard the fact that, in some circumstances, trade unions representing insiders do indeed adopt strategies targeted to the defence of outsiders. As we have seen in the review of trade unions' responses to outsourcing, trade unions' strategies are not always targeted to the pure and simple defence of their members, but include also external workers even in cases of strong managerial pressures for concessions. Thus, what lies at the base of these inclusive strategies? The crucial point we want to advance is that, if one looks more closely to the issue, the relationship between a union's membership composition and its strategic orientations is much more complicated than the dualisation literature tends to portray. This for several reasons. First, the definition of what are members' interests and how they are best represented is not as immediate as the dualisation literature portrays. Second, trade unions are not solely organisations for the representation of members' interests, but, at least in several national traditions, also movements for the advancement of general interests. Lastly, trade unions are also organisations with autonomous interests which may be different than those of their members. Each of these points, thus, highlights pressures that trade unions have to balance against their members' immediate requests and grievances. In the following paragraphs, I will examine each of these issues separately.

2.3.3. The difficulty of defining members' interests

Even if apparently banal, the statement according to which "trade unions represent the interests of their members" entails several problematic points.

First, it is not automatic to define what are workers' interests. Indeed, workers'

interests are often "scattered and particularistic" (Regalia 1988: 363) and come out of "a heterogeneity of immediate and localised experiences and aspirations" (Hyman 1992: 159). Spontaneously, they era "as likely to be in conflict as in congruence" (Hyman 1992: 159). As Hyman notes, indeed, looking at the history of trade unions in different countries, one finds scarce instances of a "natural" homogeneity of interests among workers, which could allow to speak of "workers' interests" as a homogeneous entity. Still, the working class can achieve its goals only to the extent that it is able to set aside dividing grievances and concentrates on common demands which foster collective organisation (Offe and Wiesenthal 1980: 79). Indeed, being a subordinate class, the working class can compensate its lack of power solely by means of collective action. Trade unions and their solidaristic agenda are the attempt to identify and advance a commonality of interests among workers, making partially contradictory requests sufficiently convergent as to be able to sustain collective action. In order to formulate a consistent political agenda which enables them to effectively represent their members' interests, trade unions "focus on distinctive aspects of their constituents' individual and collective experiences" (Hyman 1994: 120). The second problematic point is, thus, that the process of representation does not imply a pure and simple reflection of members' immediate requests, but have always required a process of selection and recomposition of the demands that are to be represented¹² (Regini 1981). The last problematic point is that, in order to be able to select common grievances and requests, trade unions need to distance themselves from what their members might perceive as their immediate interests. Indeed, trade unions' autonomy from the rank and file has been considered of crucial importance for the effective representation of workers' interests (Crozier et al. 1975, Offe and Wiesenthal 1985, Hyman 1997). The issue of "how to be receptive without being dependent and excessively conditioned by the specific (and often contradictory or incompatible) preferences of the represented" (Regalia 1988: 363) is crucial in the definition of trade unions' agenda. Surely, trade unions have to be sufficiently in line with what members

Thus, even in the past, the definition of inclusive agendas which encompassed broad segments of the workforce, was far less the result of workers' having more homogeneous interests (as it is often implied in contributions on the disaggregation of the working class), than of conscious political efforts on part of trade unions (Hyman 1992). The construction of a working class solidarity, as articulated in industrial unionism, "has always required a deliberate and precarious effort, a mobilisation of bias by leaders and rank-and-file activists" (Hyman 1992: 159).

perceive as their immediate interests, in order to avoid problems of consent (Regalia 1988), but their agenda cannot be a pure and simple mirroring of members' immediate requests.

These observations contest the idea, often implicit in the argument that trade unions represent insiders' interests, that interests are something fixed and "natural", but argues that they have always to be identified and defined by means of interpretation and selection. Thus, the identification of core workers' interests may not be as immediate as the dualisation literature implies. Indeed, the dualisation literature has always portrayed the interests of insiders and outsiders as clearly separated and often opposing. However, several research contributions have highlighted the fact that, under certain circumstances, the interests of these workforce groups may indeed overlap (Benassi and Dorigatti 2013, Vlandas 2013). The presence of more inclusive strategies on behalf of trade unions representing insiders, thus, may be explained by the fact that the inclusion of outsiders is perceived as beneficial also for core workers. This is especially the case when labour market competition arises between insiders and outsiders. Indeed, several authors have highlighted that unions have adopted inclusive strategies towards external groups of workers in order to protect their members from the threat posed by an unregulated supply of labour on the external labour market (Lee and Frenkel 2004: 520ff., MacKenzie 2008: 543, Benassi and Dorigatti 2013). According to Atkinson, trade unions' inclusive strategies towards peripheral employees may "represent a safeguard for core workers, so that their jobs might not be threatened by cheaper, external labour" (Atkinson 1985: 27). This echoes Common's idea that trade unions' strategies and boundaries aim at matching the level in which competition takes place, i.e. the level of the market (Common 1909).

As we have seen in the previous paragraph, the dualisation literature explicitly excludes the possibility that peripheral workers compete and pressure core ones. Instead, this literature stream argues that core workers are unaffected or may even benefit from the presence of peripheral labour. However, several authors have questioned the idea according to which the presence of a secondary labour market is an instrument to protect core workers. Instead, they have argued that processes of vertical disintegration by subcontracting and outsourcing may be utilised by employers as a way to change power relations inside their companies (Grimshaw

and Rubery 2005: 1030). Outsourcing and flexibilisation at the margins thereby do not constitute ways to protect core workers from market fluctuations, but rather to expose also internal employees to external competition, undermining labour bargaining power (Ackroyd and Procter 1998, Rubery 2007, Gumbrell-McCormick 2011: 296) and the "insiders' privileged position in the long run" (Eichhorst and Marx 2011: 74). Indeed, several mechanisms may contribute to pose core workers under pressure. First, competition between core and peripheral workers may arise (Holst 2014: 4, Benassi and Dorigatti 2013, Vlandas 2013). The introduction of market mechanisms for purchasing goods and services and the presence of similar or comparable jobs on the external labour market underlying very different working conditions may become a benchmark onto which internal employees' performance is evaluated (Grimshaw and Rubery 1998). The possibility for managers to freely choose on the market the most convenient source of goods and services and to undertake "whipsawing" practices between internal and external providers dramatically increase their bargaining power in negotiations (Greer 2008). This may lead to the intensification of work and the increase in concession bargaining also in core positions (Flecker et al. 2008, Doellgast and Greer 2007, Haipeter and Banyuls 2007). Moreover, this may produce a disciplining effect among the internal workforce (Holst et al. 2010: 128ff.). Thereby, core workers' propensity to exercise their collective voice might be reduced, with lower participation to strike and a more reluctant attitude. Thus, "external restructuring seems to retroact negatively on the (...) core workforces (Flecker 2009: 252).

According to this approach, thus, trade unions willing to protect their members' interests have not necessarily to adopt exclusive strategies, but may decide to include peripheral workers. However, this observation highlights another potentially important point linking core workers' position and trade unions strategies, i.e. the possible existence of a time lag between vertical disintegration and trade unions' responses. Indeed, in a first phase, employers' segmentation strategies may benefit core workers, avoiding them having to enter concessions, but pressure may become visible in a second phase, when the secondary workforce increases competition.

2.3.4. Swords of justice or vested interests?

Besides the difficulty of defining workers' interests, a further element related to the nature of trade unions complicates the narration proposed by the dualisation literature. Indeed, even if trade unions are voluntary associations, members might not be their only point of reference. As Regalia has argued, "unions are simultaneously and inextricably, even if with changing emphases over time, both free organisations (with a defined base, internal leaders elected according to statute, an administrative bureaucracy, rules of internal behaviour) and agents of more general representation, or movements potentially addressed to all those having in common the condition of workers (thus with uncertain and mutable perimeters and borders)" (Regalia 1988: 352). The idea that trade unions are contemporary "swords of justice" and "vested interests" (Flanders 1970), with both a "public" and a "private" orientation (Hyman 1994: 120) is well present in the literature on trade unionism. What is important for us is that trade unions have always had (with more or less intensity) ideological interests which sometimes detach them from the immediate interests of their members¹³. This is particularly true for industrial unions, which have always showed a strong commitment to a working class orientation and developed solidaristic wage policies aimed at reducing status and occupational differences (Streeck 1993: 41). As argued by Streeck, indeed, industrial unions developed from workers self-identification as members of a shared community of salaried workers, i.e. to their being members of the working class (Streeck 1993: 41). Other trade union models, instead, have historically displayed far less inclusive attitudes. Craft unions, which are based on workers' shared occupational identities, have traditionally aimed at protecting their members' market position and at increasing the rewards for the possess of particular skills. In order to achieve this goal, they have set membership rules that restrict access to workers belonging to a specific occupational community (Streeck 1993: 44). Similarly, enterprise unions represent only workers belonging to a

It has to be stressed, however, that members' interests themselves might be less concentrated on the maximisation of their individual welfare than expected by a part of the literature. Indeed, several studies have highlighted how trade union members might have more egalitarian attitudes than average workers. This may be the effect of a self-selection process (individuals with a more egalitarian ideological disposition are more likely to join a union) (Checchi et al. 2010). Other have, instead, argued that being in a union generates or sustains egalitarian orientations (Pontusson 2013). In both cases, however, trade union members might be as much committed to defending the interests of disadvantaged groups of workers as their own.

specific company, and usually only the core workforce (Streeck 1993: 45). Another typology which points to similar analytical alternatives is that of class vs. associative unions (Regini 1981: 22). While the latter define their representation realm in the bulk of their members, the former aim at representing the working class as a whole (Regini 1981: 22).

The idea that identities and ideological orientations play a crucial role in defining trade unions' constituencies is well present in the literature (see Hyman 1994). According to Herrigel, for example, different identities shape "the aims of trade unions" and their conception of "who should belong to them" (Herrigel 1993: 380), thereby defining their underlying constituencies. Moreover, identities also shape how trade unions read workers' interests, since they define the "worldviews" and "cognitive maps" through which they read the external environment (Locke and Thelen 1995). Thereby, identities represent the ideational dimension of path dependency (Regini 1981: 32). Indeed, as argued by Hyman "identities might be viewed as inherited traditions which shape current choices" (Hyman 1994: 132). Thus, even under changing external conditions which would push unions to the adoption of path-breaking strategies for material reasons (such as the defence of their members' interests), identities may still commit unions to past patterns of behaviour¹⁴.

Also with regard to the representation of outsiders, ideological differentiations have been found to be important in order to explain varying unions' strategies. Doellgast has highlighted how French class-oriented unions have displayed more inclusive strategies than their German counterparts in cases of outsourcing, with the former strongly pushing for the extension of collective bargaining coverage to newly established subcontractors, while the latter have been more concentrated on the representation of core-workers' interests in incumbent firms (Doellgst et al. 2009a: 375). A recent analysis on trade union representation of agency workers shows the existence of a "Southern-European" path of inclusiveness, whereby trade unions in Southern Europe show comparatively higher levels of inclusiveness with respect to

A case in point is the Italian debate over the so called "scala mobile" during the 1980s and 1990s. Even if this institution was increasingly contested by an important part of their membership (the one constituted by skilled workers and technicians, which in some cases defected traditional unions and became member of new ones), it was not until 1992 that Italian unions agreed to abandon the system. According to Locke and Thelen, this was due to the fact that the "scala mobile" represented the unions' commitment to egalitarianism, a central pillar of their identity (Locke and Thelen 1995).

other European trade unions. According to the authors, this is due to the fact that "unions bargain following their working-class ideology, which is reflected in solidaristic bargaining policies" (Benassi and Vlandas 2013: 31).

Moreover, with regard to outsourcing, trade unions might perceive this form of organisational restructuring as problematic, because it constitutes "a breach of the principle of industrial unionism and an attempt of the employers to enact some kind of inequality between different groups of workers" (Kern and Sabel 1994, cit. in Jonker-Hoffren 2011: 381). Indeed, industrial collective agreements also constituted an instrument of wage solidarity between stronger and weaker labour market segments (Swenson 1991). However, outsourcing makes wages increasingly dependent on market mechanisms and the power of specific workforce segments on the labour market. Thus, trade unions may oppose outsourcing on base of their egalitarian orientation (Kern and Sabel 1994).

2.3.5. Trade unions' organisational interests

Lastly, trade unions are institutionalised organisations which may have developed their own organisational interests, which are separated from those of their actual or potential members. As Regini has argued, "the more trade union action becomes the monopoly of large and consolidated organisations (...), the more trade union choices will be informed by a "logic of action" corresponding to the interests of the organisation as such, rather than to the interests of its members or leaders, or to its ideological legacies"¹⁵ (Regini 1981: 20). The action of the organisation, thus, can be explained as aiming at maximising its power, by ensuring the resources needed for achieving its goals.

One of the most important frameworks for analysing different unions choices within this approach is Schmitter and Streeck's "logic of membership"/"logic of influence" distinction¹⁶ (Schmitter and Streeck 1999). The "logic of membership"

It is important to underline that trade unions' focus on their organisational interests does not necessarily imply a departure from their original aims or a betrayal of their members. Indeed, the defence of the organisation and of its capacity to survive "constitute the guaranty to be able to ensure benefits to its members also in the future, even in cases of the latter lower structural strength" (Regini 1981: 20).

The model was indeed developed in order to account for different logics of behaviour within employers associations. Still, the two authors have argued that the model is applicable to all

represents trade unions imperative to secure a strong membership base and reflects trade unions' need to offer sufficient incentives to attract and retain members. The "logic of influence", instead, represents the unions' imperative to have access to and to exercise influence over other actors, such as employers and the state, "and hence to extract from this exchange adequate resources" (Schmitter and Streeck 1999: 19). In organisational terms, these two logics create the opposing pressures to be responsive to the interests of their constituency (and, thus, the tendency to focus on narrower groups of workers in order to be better able to reflect their short-term interests) and to be influential on their counterparties (and therefore to be sufficiently encompassing as to be recognised as representatives of large interests). What is significant for our reasoning is that these two imperative are often opposite and trade unions have to balance them. Thus, responsiveness to members' short-term interests is not the only guiding imperative of trade unions' strategy formulation.

This framework has been recently used in order to assess the definition of trade unions' constituencies within the insider/outsider debate (Davidsson and Emmenegger 2013). As Davidsson and Emmenegger highlighted, indeed, trade unions' behaviour towards labour market reforms is better explained looking at unions' organisational interests (and their willingness to maintain influence over policy-making processes), rather than at their membership composition (Davidsson and Emmenegger 2013). Indeed, the two authors found out that trade unions have allowed for two-tier labour market reforms (i.e. reforms where job security legislation is not deregulated for all labour market participants, but solely for employees in non-standard forms of employment) also in countries where trade unions have a very encompassing membership, such as Sweden. According to the authors, this behaviour was due to the willingness to protect their "institutional power resources" (Davidsson and Emmenegger 2013: 341).

Interestingly, Clegg identifies an opposite direction of the relationship between

forms of intermediary organisations, including trade unions (Schmitter and Streeck 1999).

According to the authors, two organisational interests are simultaneously at stake in case of a labour market reform: trade unions' participation in the administration of dismissals and their institutional role in the formulation of labour market policies. In difficult economic times, protecting the latter means that unions are likely to make concessions in order to remain part of the deal. However, they will accept concessions only to the extent that they do not question their first organisational interest. This can happen if labour market reforms have a dual-tier character (Davidsson and Emmenegger 2013: 341).

trade unions' organisational interests and their inclusiveness, arguing that organisational interests may make trade unions supportive of pro-outsiders reforms (Clegg 2012). In his study on the reforms of unemployment insurance systems in Belgium and France, Clegg explains Belgian unions' pro-outsiders orientation as deriving from the governance of the unemployment insurance system. According to Clegg, it is its structure and mode of operation that have shaped Belgian unions' organisational interests and, thus, their policy preferences, pushing them to adopt inclusive attitudes towards outsiders (Clegg 2012: 263ff.).

Other frameworks have looked at trade unions organisational interests in order to explain how they set their boundaries. The revitalisation literature, for example, has argued that trade unions may adopt more inclusive strategies towards previously unrepresented groups of workers for power-related reasons (Frege and Kelly 2004). Indeed, confronted with falling membership levels within their traditional constituencies, unions might attempt to organise new groups of the workforce in order to strengthen their mobilisation capacities and, thus, their power resources. Still, in how far unions have an incentive in organising new groups of workers strongly depends on the institutional context in which they operate (Baccaro et al. 2003). Indeed, the necessity to organise new groups of workers is likely to be connected with trade unions' reliance on their autonomous power resources. Thus, in less institutionalised contexts, where trade unions rely solely on the mobilisation of their membership for recognition, trade unions will have stronger incentives to organise the unorganised and will, thereby, show more inclusive strategies. On the contrary, if trade unions are embedded in strong institutional configurations, which partially detach their influence capacity from their mobilisation and labour market strength (Regalia 2009), they will have less incentives to organise unrepresented groups of workers (Baccaro et al. 2003: 121). Several contributions have looked at the different propensity of trade unions in different institutional contests to include new groups of workers as a consequence of the different power resources they may rely on (Heery and Adler 2004, Marino 2012). Similarly, other authors have argued that eroding institutional resources, might trigger more inclusive strategies also within traditionally strong institutional systems, such as the German one (Greer 2008, Turner 2009).

With regard to our specific question, unions might adopt inclusive strategies

because, by eroding their organisational domain, outsourcing reduces also their membership potential. Analysing the responses of the Irish telecommunications union (CWU) to outsourcing, MacKenzie highlights the role of organisational incentives in pushing the union to adopt inclusive strategies towards workers employed by subcontractors (MacKenzie 2009: 540). Indeed, he argues that "the possibility of losing financial viability due to the hemorraging of membership through outsourcing resonated within the CWU and informed the development of a multidimensional strategic response to the increase in subcontracting in the Irish context" (MacKenzie 2009: 548). This fear came from the union awareness of the effects that outsourcing had on a sister trade union in New-Zealand. There, "downsizing and outsourcing had reduced the membership base of the Communications, Electrical and Plumbers' Union (CEWU) to such an extent that the union found it increasingly difficult to service its members and remain financially viable" (MacKenzie 2009: 548), up to the point that the union went into liquidation in 1995.

2.4. Research hypothesis and operationalisation

From the review of the literature, we have highlighted the fact that exclusionary strategies are just one possible response to employers' segmentation strategies. Indeed, segmentation strategies pose trade unions in front of a dilemma, where inclusion and exclusion of peripheral workers may both be viable options for retaining their labour market power. From the literature, we have also derived some expectations related to the factors influencing this choice. First, we have reviewed explanations linking trade unions' strategies to their membership composition (Palier and Thelen 2010, MacKenzie 2009). Among them, as we have seen, a crucial point of difference relates to the relationship between core and peripheral workers, and in particular to the presence or absence of competition between insiders and outsiders. Second, we have presented explanations looking at trade unions' ideological orientation in order to explain trade unions' inclusive ore exclusive strategies (Doellgast 2009, Benassi and Vlandas 2013). Lastly, we have

reviewed contributions which have highlighted the role of organisational incentives for explaining trade unions' behaviours when facing segmentation (Clegg 2012, Davidsson and Emmenegger 2012, MacKenzie 2009).

From the review of the literature we can now formulate the expectations guiding our research.

A first expectation comes from a combination between the dualisation literature and those studies pointing to the role of labour market competition in explaining trade unions' strategies. Indeed, both argue that trade unions' strategies reflect the interests of their members and both focus on core/periphery dynamics for explaining trade union boundary setting. Thus, the configuration of the core/periphery distinction made by employers when deciding to subcontract a specific segment of the production process is relevant in explaining trade unions' orientation. Indeed, a crucial point is whether the established (or to be established) division produces competition between core and peripheral workers and whether the latter are able to put pressure on the former. If this is the case, it is more likely that trade unions will mobilise for reducing dumping possibilities from employers and to stop the pressure these phenomena poses also on trade unions' core constituencies. Thus, we can argue that the number of outsourced workers and their characteristics (more or less peripheral in respect to core workers' day-to-day operations) matter for the level of inclusiveness of trade union bargaining and organising initiatives towards outsourced workers. If outsourced workers perform the same tasks of the workers employed by the core firm, pressure on insiders' working conditions will increase through outsourcing and trade unions strategies will tend to become more inclusive¹⁸. On the contrary, if outsourcing takes place under a more classic core/periphery model, it will be unlikely, under the interest based hypothesis, that unions will strategically act in order to regulate it.

The second expectation comes from those literature strands which highlight the role of trade unions' identities for union boundary setting. We expect that a stronger working-class orientation will be associated with more inclusive strategies.

Third, we expect that also organisational incentives may matter. In particular, we expect that if outsourcing strongly questions the foundations of employees representation (at sectoral or local level) by, for example, eroding its organisational

Trade unions can aim at the "extension of those agreed rates and conditions to peripheral and external groups *where common or comparable jobs can be* defined" (Atkinson 1985: 27).

domain, workers' representatives are more likely to adopt inclusive strategies.

Lastly, the literature review has given us important insights in order to identify the inclusiveness of trade unions' strategies. We will analyse trade unions' inclusiveness on the base of two elements. First, who enters the domain of trade union representation and, second, the content of the collective agreements applied to different workforce groups in a same value chain. This latter point will identify the segmentation of working conditions between different workforce groups. In particular, analysing the content of the measures bargained, we will look whether they set equal (or better) conditions for workers at subcontractors, whether they set worse conditions for them (but still under the representation domain of the same trade union) or whether they do not exist. In the last case, this may result both in the regulation of workers' pay and conditions through another union's collective agreement or the lack of any collective agreement. We do not differentiate between these two outcomes, because they both represent an exclusion of external workers from the union's boundaries. Moreover, the strong differentials in wages and working conditions between collective agreements of core sectors and those applied to other sectors make it very likely that the absence of provisions negotiated by core sectors' trade unions will produce a significant deterioration of working conditions for workers employed in outsourced activities.

Chapter three

Case selection and methodology

As I have shown in the previous chapter, this research aims at shedding some light on the role trade unions play in segmented labour markets. More specifically, the research aims at identifying the causal mechanisms driving trade unions to develop inclusive or exclusive strategies in cases of vertical disintegration. This chapter will explain the methodological choices undertaken for the research, the reasons why I have chosen the case study method as the most appropriate for my research questions and the German chemical and metal trade unions as my cases.

3.1. The case-study method

As we have discussed in the previous chapter, the questions guiding my research are the following:

- Which kind of strategies do trade unions adopt in cases of vertical disintegration?
- Which are the reasons guiding trade unions to adopt inclusive or exclusive strategies towards marginal workers?

As it is well known within the social science literature, different research questions require different methods in order to be answered. The research questions I am posing are mostly concerned with the exploration of the causal mechanisms linking different explanatory variables (which we have reviewed in the literature) to a particular trade union behaviour. According to Elster, causal mechanisms are defined as "frequently occurring and easily recognisable causal patterns that are

triggered under generally unknown conditions" (Elster 1998: 45). Thus, they identify regularities in the processes or pathways through which an outcome is brought into being. As it has been argued by the literature, the case-study method has a comparative advantage in "the development and testing of historical explanations and the detailed exploration of hypothesised causal mechanisms in the context of particular cases" (George and Bennett 2005: 6). Thus, the case-study method seems to be particularly well suited for answering to questions which are concerned to the reconstruction of causal paths.

A case study might be defined as "the intensive study of a single case where the purpose of that study is – at least in part – to shed light on a larger class of cases (a population)" (Gerring 2007: 20). However, its theoretical leverage does not rest in the representativeness of the case at hand with regard to the population. Indeed, differently from cross-case, quantitative analysis, where large samples and randomisation should ensure representativeness and a minimum of selection bias, representativeness in statistical terms can hardly be claimed in case-study research. In case-study research, instead, case selection should take place on another base. Indeed, purposive (or theoretical) sampling is the most widely used method for selecting cases in case-study research. Thus, the question is now why do we consider the German metal and chemical trade unions appropriate cases for our research question, namely the behaviour of trade unions confronted with labour market segmentation and vertical disintegration in particular. As we have seen from the previous chapter, the literature leaves us with different (and contrasting) hypothesis for answering this question. We have reviewed hypothesis looking at different core/periphery configurations which give rise to the presence or absence of competition between core and peripheral workers an, thus, may trigger different interests among members with regard to more or less inclusive strategies; others look at the ideological orientation of trade unions and still others at their organisational interests. Thus, we need cases which are able to discriminate between these different hypothesis.

3.2. The German chemical and metal unions as crucial cases for the dualisation literature

A first element for justifying the choice of the German chemical and metal trade unions is that they constitute crucial cases for the dualisation literature. As argued by Eckstein, a crucial case is "a case in which a theory is most likely to be true" (cit. in George and Bennett 2005: 9), because the variable configuration the theory is based on are fully at hand. Thus, if a theory fails to predict the outcome in a crucial case, it is strongly impugned.

As we have seen from the literature review, the dualisation literature is expecting trade unions in Continental market economies to be particularly prone to segmentalist strategies (Thelen 2012: 146). This is due to three main reasons: first, they are inserted in a structure of opportunity that enables them to exert influence on employers, but are losing power in terms of autonomous power resources. Second, their membership composition is strongly skewed towards insiders, understood both as permanent employees and employees in core sectors of a country's economy. Third, employers in these sectors are interested in mechanisms of coordination with labour for reasons of economic efficiency linked to their competitive strategy, but contemporary press for cost reduction at the periphery. As we have seen in the previous chapter, what follows from these premises is that trade unions in core sectors will try to exploit their remaining power and employers' willingness to coordinate to protect their members from the negative effects of liberalisation (Palier and Thelen 2010). As a consequence, however, negative externalities will be confined to other (and weaker) segments of the workforce producing dualisation (Thelen 2012). Patterns of adjustment, thus, are based on a cross-class coalition between labour and capital in core sectors of the economy and not on unilateral employers' action (Hassel 2014, Palier and Thelen 2010, Thelen 2012).

Germany is a crucial case for this theoretical approach, since it confirms all three conditions.

First, German trade unions have traditionally been considered among those trade union movements which enjoyed a strong capacity of influence within their country's economic and social system (Frege and Kelly 2004). The traditional German model of industrial relations has, indeed, ensured trade unions a strong and institutionalised power position (Behrens et al. 2003). This happened via several channels: a stable system of collective bargaining, institutionalised structures of workers' voice at plant level with far-reaching rights¹⁹, and trade unions' involvement in *policy-making* and in the administration of important segments of the welfare state (Streeck and Hassel 2004: 102).

However signs of declining power have started to appear after the country's reunification, triggered both by common challenges affecting trade unions all over the world and country specific-factors.

Over the last two decades, German trade unions have significantly declined in terms of membership. Unions belonging to the German Confederation of Trade Unions (*Deutscher Gewerkschaftsbund*, DGB) have lost almost 6 Million members in the 21 years between 1991 and 2012 (DGB 2013). After reunification, membership of German trade unions reached a peak of almost 12 Million members (11.800.412). In 2012, DGB unions counted slightly more than 6 Millions (6.151.184) (DGB 2013). Density levels also declined, with net union density²⁰ moving from almost 34,9% in 1980 to 18% in 2011 (ICTWSS 2013).

This tendency was matched by a corresponding process among employers. Indeed, as argued by Behrens, we have assisted to a process of "external erosion", in that more and more firms exited employers' associations and several new ones never

It is important to note that the works councils are juridically not a union body. Indeed, they are representation bodies that can be elected by all workers (being trade union members or not) within companies with more than 5 workers and are, thus, autonomous from trade unions. For this reason, their introduction was in a first time strongly opposed by trade unions (Jackson 2005). However, trade union have historically been able to control them in the vast majority of cases. This happened through a double channel. First, trade unions were able to unionise works councils. Indeed, in the 1980s, about four out of five works councils were union members (Haipeter 2013: 119). Being union members, works councils shared trade unions' orientations and goals, and performed important functions for the union such as recruiting union members and waking over the implementation of collective bargaining agreements in the plants (Behrens 2009: 278). Second, works councils require a large array of competences for carrying out their tasks. Trade unions have developed a wide ranging system of training activities (often financed by employers as foreseen in the Works Constitution Act) in order to satisfy their needs. This has enabled them to exercise their influence on them (Behrens 2009: 278). Accordingly, works councils have been considered as a sort of enterprise *longa manus* of union organisations.

According to Visser, union density expresses "the rate of "actual" to "potential" membership" (Visser 2006: 43), i.e. corresponds to the proportion of trade union members on all "wage and salary earners in employment" (Visser 2006: 38). Thus, retired and unemployed members, as well as other groups not belonging to the dependent employees (such as students or the self-employed) are excluded from the count.

entered (Ellgut and Kohaut 2010), and of "internal erosion", in that the membership to an employers association was separated from its collective bargaining effects (Behrens 2013: 476). Indeed, through the introduction of so called OT-Mitgliedschaft²¹, employers associations enabled their members to keep benefiting from the services connected to membership without being obliged to apply the collective agreement bargained from the association (Behrens 2013: 476).

These tendencies produced a dramatic decline in collective bargaining coverage, which constitutes a second indicator of trade unions' eroding influence capacity since this measure indicates the share of employees whose terms and conditions of employment are influenced by trade union negotiations. Since reunification, collective bargaining coverage has constantly shrunken. Between 1998 and 2011, collective bargaining coverage in Western Germany has reduced from 76% on all employees to 61% and in Eastern Germany from 63% to 49% (WSI-Tarifarchiv 2013: 15).

Moreover, increased difficulty on the unions' front was also visible with regard to the content of collective bargaining. Taking into account the sole parameter of wage increases, since the year 2000, trade unions have rarely been able to exploit the so called "cost neutral" scope of collective bargaining. This index is composed by the sum of the inflation rate and of the annual productivity increase and traditionally constituted the parameter trade unions relied on in order to set their bargaining demands, since it ensures the stability of a country's wealth distribution. This cost-neutral scope was fully exploited in the the chemical and metal sectors, but this was not the case in all other sectors (Bispinck 2011: 2). As we will see below, this is a signal of strong differences regarding trade unions' strength in different sectors.

Furthermore, the capacity of collective bargaining agreements to set homogeneous standards in an industry has also reduced, because of the decentralisation of collective bargaining and the increased number of derogations of sectoral collective agreements at lower levels.

On the one hand, since the 1990s there has been a spread of derogations negotiated at plant level between works councils and employers through the so called pacts of

OT stands for "Ohne Tarifbindung", without bargaining coverage.

employment and competitiveness (Rehder 2003, Seifert and Massa-Wirth 2005). These pacts typically involve the exchange between job security and investment guarantees on part of the employers for concessions on several aspects of the employment relationship on behalf of workers and their representatives. Pressured from employers threats to offshore production, works councils have come to accept concessions in order to save jobs. Often, these pacts have been secreted from trade unions or have took the form of open alliances between management and works councils against the collective bargaining parties²² (Hassel 1999: 499). These instruments, thus, open up a major problem for trade unions, since derogations are removed from their control.

For stopping this process of "wildcat" decentralisation and the massive exit of single firms form employers associations, trade unions have progressively been persuaded to accept the introduction of opening clauses within collective agreements (Streeck 2009: 41). This instruments opened up the possibility to deviate from sectorally set standards (usually working time and additional bonuses, but in some cases also wages, Bispinck 2011) under particular circumstances, such as a difficult economic situation of the company (Haipeter 2011). The use of these clauses boomed in the 2000s. Indeed, the percentage of firms making use of opening clauses moved from 22% in 1999 to 75% in 2005 (Streeck 2009: 41).

These two processes have progressively opened up a gap between bargained wages and actual ones. According to estimated from the DGB research centre, indeed, agreed pay rose in real terms by 6.7% over the 2000-2010 period. However, over the same period real actual earnings had fallen by 4% and in 2010 they set at the 96% of their 2000 level (Bispink 2011: 1).

Furthermore, the decentralisation process, especially in its unregulated variant, points to another major problem within the German industrial relations system, namely the weakening relationship between trade unions and works councils. This

This observation is mostly pertinent for small and medium enterprises, where trade unions have difficulties in monitoring works councils' behaviour (Hassel 2014). On the contrary, in larger firms trade unions are often aware of the presence of such pacts and of their content. According to a study of Hassel and Rehder on pacts of employment and competitiveness in the largest 120 German companies, in only 10% of the companies were the unions not involved in some way in the negotiations (Hassel and Rehder 2001). However, even in cases where trade unions were somehow involved, derogations have arguably produced a shift in bargaining power from trade unions to works councils (Pulignano and Doeflinger 2013: 4151).

trend is confirmed also by data looking at the evolution of trade union membership among works councillors, which has progressively reduced over time (Behrens 2012).

However, also the share of employees working in establishments with a works council has reduced over time. Indeed, this share has moved from 51% to 44% in West Germany and from 43% to 36% in East Germany between 1996 and 2011 (Behrens 2012: 16). This trend, thus, poses a further problem for trade union, because they increasingly lack their traditional recruitment channel.

All these instances point to a decline in trade unions' strength and a changing balance of power between labour and capital (Streeck and Hassel 2004: 104, Streeck 2009).

The second point regards the membership composition of German trade unions. According to several authors, trade unions' membership in Germany is extremely skewed towards labour market insiders employed in core sectors (Hassel 2007, Addison et al. 2006, Schnabel and Wagner 2007). Indeed, trade union membership still reflects workforce composition of the 1960s, with union members concentrated in manufacturing industries and among blue-collar workers (Hassel 2007: 178). Even if employment has massively shifted to the service sector (with the service sector employing 66.1% of the workers and manufacturing 31.0%), this was not reflected in the membership composition of the DGB trade unions. Indeed, in 2005 48.1% of their members worked in the service sector, while 46.1% in manufacturing companies. What is even more interesting is that the share of service sectors workers among union members was 42.4% already in 1980 (Hassel 2007: 184). This suggests that trade unions have not been able to set a foot in those service sector industries which have expanded since then on. Indeed, "specialised professional services such as education, police, and railways primarily focused on public services increased their share of members" (Hassel 2007: 184). In addition, also the presence of works councils is much higher in manufacturing industries than in the service sector. In the former, around 68% of workers work in a company with a works council, while in the latter this share does not overcome 55%²³

According to the research institute of the DGB unions, this is the value for the transport and logistics industry. In other service industries this share is much lower with 31% of workers represented by a works council in retail, 12 in restaurants (Behrens 2012).

(Behrens 2012).

Lastly, the dualisation thesis points out that German employers, even if strengthened vis-a-vis labour, have not pursued a wholesale liberalisation offensive against coordinated employment relationship and are still interested in sectorallevel collective agreements and the participation of workers through the works councils system. Relying on a Varieties of Capitalism (VoC) approach²⁴, those authors argue that the production system diffused in German companies, often described as being based on Diversified Quality Production (Streeck 1991), requires firm-specific skills and workers' involvement. Thus, employers have strong incentives to sustain coordination in order to ensure their comparative economic advantage. It is for these reasons that several authors have argued that employers in Germany will not depart from traditional models of regulation of the labour market and industrial relations and sustain coordination with labour even facing tighter and more competitive markets and the economic pressures of globalisation (Thelen and Kuome 2006, Thelen and van Wijnbergen 2003). However, these pressures have required restructuring measures for ensuring competitiveness to take place. Since the economic incentives for sustaining coordination with labour are still there, these pressures have not translated in patterns of adjustment geared towards generalised liberalisation (understood as the "active (political) dismantling of coordinating capacities", Thelen 2012: 147), but to a remodulation of the traditional model that reduces its encompassing capacity and gets to cover solely the core workforce (Thelen 2012, Emmenegger et al. 2012, Carlin and Soskice 2009). According to this approach, in CMEs like Germany, employers still rely on firm-specific skills of their core workforce, but at the same time require to adjust their production processes to more competitive markets and become more cost-effective. Their preferred option is, thus, to shrink the extent to

According to the VoC approach, employers in Coordinated Market Economies (CMEs) have based their competitive strategy on "high-quality, high value-added production that depends on a high degree of stability and cooperation with labour" (Thelen 2001: 73, see also Streeck 1991) and employees possessing firm-specific skills. However, labour cooperation and commitment are only viable if there are institutions which remove conflict from the workplace and that ensure workers' participation at plant level. Furthermore, workers' investment on skill specificity is only possible if workers have incentives to remain within the company and, thus, if they enjoy strong job security (Hall and Soskice 2001, Thelen 2001). This is the reason why the VoC approach considers employers in CMEs to be supportive of both sectoral collective bargaining (which removes distributional conflict from the plant level) and works councils.

which they still sustain coordination, encompassing solely their core workforce and relying more extensively on an unregulated periphery by outsourcing low-skilled work and employing temporary workers (Iversen and Soskice 2009, Hassel 2014). As we have noted above, thus, with reducing but still significant power, a membership composition strongly biased towards core workers, and bargaining partners strongly interested in sustained coordination, employees' representatives in core sectors of the German economy (such as the chemical and metal sectors) are strongly suspected to adopt exclusionary practices and to increasingly "look inwards" (Palier and Thelen 2010: 123). Indeed, the dualisation literature expects them to enter cross-class coalitions with employers and, thereby, avoid negative consequences of restructuring for their members, by confining adjustment costs to the periphery of the labour market. As argued by Behrens, in these readings a crucial role is assigned to plant-level actors (and especially works councils), but trade unions are considered accomplice of new forms of local "egoism" at plant level which concentrate on core workers and excludes peripheral ones (Behrens 2013: 474).

Evidence for these developments are the following. First, the spread of pacts for employment and competitiveness bargained at plant level between employers and works councils, which ensure job security for core workers at the expense of more lax regulation for peripheral ones (Palier and Thelen 2010, Hassel 2012). Second, the growth of a secondary labour market characterised by non-standard work contracts and lower standards (with regard to pay, working conditions and social protection) concentrated in the service sector²⁵, whose development was fostered by

Several studies have shown that atypical employment and low-wage work (i.e. work whose hourly pay sets below two-thirds of the median hourly wage) concentrate in the service sector and, most of all, in private services. According to Hassel, marginal employment, part-time work and fixed-term contracts are overwhelmingly used by service sector employers (Hassel 2014: 66ff.). Indeed, less than 10% of marginal employment contracts are in manufacturing firms, while more than 80% are in the service sector (Minijobzentrale 2010). Similarly, the incidence of fixed term contracts strongly varies across different sectors, reaching peaks of 20% in the service sectors, while being at a level of around 7% in manufacturing (Statistisches Bundesamt 2010, cit. in Hassel 2014: 67). While other forms of atypical employment, such as temporary agency work, are also widely diffused in manufacturing (around 20% of agency workers are in manufacturing, Bundesagentur fuer Arbeit 2013: 12), they are much less important in numerical terms (agency workers are around one Million in Germany, while minijobers are now more than 8 Millions). Moreover, while the share of low-wage work has increased within the German economy (according to Kalina and Weinkopf, the incidence of low-wage moved from 19% in 1995 to 23,8% in 2011 and corresponds today to 8.1 Million people, Kalina and Weinkopf 2013: 1ff.), it has remained stable among full-time employees in core sectors (such as manufacturing

dual labour market reforms to which trade unions in core sectors did not oppose (Palier and Thelen 2010: 124, Hassel 2014, Eichhorst and Marx 2011).

Still, even if there are strong signs of segmentation occurring in the German economy, there seems to be less evidence of the political-coalitional underpinnings of these processes as advanced by the dualisation literature. Moreover, there are little proofs of the strategical thinking of trade unions and employees' representatives, since they are derived from observed outcomes. Indeed, if one looks at two core sectors of the German economy, the chemical and the metal one, and at how unions there have dealt with the process of outsourcing, one sees that the policies adopted by the two trade unions seem to show distinct features with regard to cooperation with employers, the acceptance of plant-level egoism and the adoption of exclusive strategies. The chemical union has largely accomodated vertical disintegration processes within the traditional system of social partnership which characterise the sector, accepting employers requests for outsourcing and the segmentation of working conditions between core and peripheral workers. Even in this case, however, as we will see further on, the union did not adopt purely exclusionary practices towards transferred workers, which are still all comprised in the union's bargaining domain. The metalworkers' union, instead, has shown a changing strategy over time. Even though in a first period it has adopted a more exclusive strategy, not opposing works councils using outsourcing and agency work as a way to protect core workers, it is now massively addressing the issue, organising campaigns both on agency work and subcontracting agreements and trying to organise these workers.

3.3. Other explanatory variables

As we have seen, the behaviour of the chemical and metal unions constitute a puzzle for the dualisation literature and strongly impinge the causal mechanism they indicate as driving to dualisms. Indeed, the failure of that literature strand to

or banking and finance), but has sharply increased in other sectors (such as infrastructure and transport services and household and personal service) (Bosch and Kalina 2008: 37).

predict the behaviour of the metal union suggests that we need to specify explanatory variables other than those specified by the dualisation literature. As we have seen in our review of the literature, three other explanations have been identified in the literature. Two of them (different core/periphery configurations and trade unions' ideological orientation) seem to apply well to our comparison. Thus, trough the systematic analysis of different cases, a matched comparison "can contribute to adjudicating among rival explanations" (Collier 1993: 106).

As we will better clarify in the proceeding of the empirical analysis, indeed, the metal and chemical sectors present different characteristics in terms of core/periphery dynamics in restructuring processes. Indeed, even though both sectors have been characterised by strong processes of re-organisation (including massive outsourcing), they present different characteristics in terms of the relationship between core and peripheral activities. Indeed, the chemical industry is a process industry with a vertically integrated production process. For technical reasons, outsourcing can thus take place just in auxiliary functions, such as logistics, maintenance and cleaning. On the contrary, the production process in the automotive sector is much more partitionable. Indeed, the sector has been characterised by the outsourcing not just of auxiliary function, but also of production. Thus, competition between internal and external workers should be higher in the metal, than in the chemical sector, driving to more inclusive strategies in the first than in the latter.

Secondly, the metal and chemical unions have historically constituted two opposite poles in the German trade unionism. They have been labelled by several observers as representing respectively an "activist" and an "accomodationist" orientation (Markovitz 1985). Indeed, the metalworkers union traditionally counts as the left within the spectrum constituted by the German Trade Union Confederation. On the contrary, the chemical workers' union, IG BCE, constitutes the leading example of the so called "accomodationist" front, i.e. of the moderates within the German trade union camp. Moreover, since the Seventies, the industry is characterised by a stronger social partnership orientation (usually referred to as "chemical partnership", *Chemiepartnerschaft*, see Kaetler and Hertle 1997) and much more collaborative relationships between the union and employers. As Claus Offe has

noted, this opposition "describes the opposition of a more inclusive model of class politics to a model of special interest group politics" (Offe, in Markovitz 1985: xi). Thus, the metal union should be more likely to include peripheral workers than its chemical counterpart.

Thus, the structure of our comparison is based on a "most-similar system" comparative design (Przeworski and Teune 1970: 32-34). This research strategy requires to maximise the variance on the explanatory factor of interest and to hold constant all other possible causal factors (Gerring 2007: 131). However, our two cases seem to vary in both the hypothesised explanatory variables and in the expected outcome. Still, the apparent presence of a strategic turn in the metalworkers' union strategy towards the issue of vertical disintegration enables us to divide the metal case in two, providing a shadow case for identifying the effects of the hypothesised variables on trade unions' strategies. Table 1 below shows the comparative strategy this research is based on and the variables' configuration in the three cases

Table 1. Comparative features of the independent variables

·	Metal (first phase)	Metal (second phase)	Chemical	
Membership composition	Insider-based	Insider-based	Insider-based	
Core/periphery dynamics	Competition	Competition	No competition	
Ideology	Activist	Activist	Accomodationist	
Inclusiveness	Exclusive	Inclusive	Exclusive	

3.4. Structure of the research

Research has been undertaken at two levels. On the one hand, I have analysed outsourcing patterns, trade unions strategies and labour market segmentation at the sectoral level. Here, I have looked at general tendencies within the two industries. On the other, I have analysed five cases of plants (two for the chemical and three

for the automotive industry) where outsourcing has played a significant role over the last two decades. I have explored the situation with regard to outsourcing, which functions have been contracted out and to which companies, how trade unions and employees representatives have dealt with the issue, whether and how it has been regulated and what outcomes in terms of labour market segmentation have been reached. Analysed sites for the chemical industry were the industrial park Hoechst and the Chempark Krefeld-Uerdingen, while for the automotive industry I have concentrated on the production site of Daimler in Stuttgart, of Audi in Ingolstadt and of ZF in Friedrichshafen.

This research structure enables me to overcome a possible problem in researching the strategic orientation of employees' representatives within a dual system of interest representation such as the German one. Indeed, as we have already argued, in the German industrial relations system, trade unions and works councils are two autonomous actors, which may have different interests and behave in different ways (Mueller Jentsch 1995: 61ff., Jackson 2005). Thus, looking both at sectoral and plant level we can disentangle how the relationship between trade unions and works councils unfolded in the context of vertical disintegration processes and analyse eventual interest conflicts or different positions.

Within the interviews, there has been no time limitation with regard to vertical disintegration processes and trade union action. However, since the major outsourcing wave testified by the interviewees has taken place between the end of the 1990s and today, this is also the time frame the research mostly refers to.

3.5. Data collection

Data collection has been based on in-depth interviews with key informants. These are trade unionists, both at national and regional level, works councillor, HR managers and officials of employers' associations (see table below for details on the distribution of interviews in the five cases)²⁶. The interviews aimed at gaining a

²⁶ Unfortunately, it has been possible to collect just one interview with representatives of the management. In some cases (such as InfraServ Logistics, Clariant, Bilfinger Maintenance Sued),

closer insight into trade unions' and works councils understanding of vertical disintegration processes and their effects on core and peripheral workers, as well as their behaviour towards these restructuring processes (whether and how they were regulated and for which reasons). Interviews were collected within the period September 2012 to November 2013. They ranged between 30 and 90 minutes in length, were recorded and fully transcribed. This information was supplemented through the analysis of trade union newspapers and position papers, unions' and works councils' blogs and websites, companies' annual reports and websites, and other secondary material. The outcomes of trade unions' strategies and especially their influence over wages and working conditions across different groups of the workforce were reconstructed via the analysis of collective agreements bargained at regional and plant level.

the management refused to give an interview. In the rest of the cases, there were no reactions to repeated phone calls and emails. According to other informants (generally works councillors) this was due to the sensitivity of the topic, which is currently under high media attention in Germany.

Chapter four

The chemical industry

In 2012, the German chemical industry employed slightly less than 435,000 workers (VCI 2013a: 50). Even though in the last 20 years the industry experienced considerable job losses (after unification the German chemical industry employed around 716,000 workers, ibid.: 50), it still counts as the European leader in the chemical sector, accounting for 29 percent of the chemical production within the European Union. Moreover, with its €156.4 billion turnover made in 2011, the German chemical industry is the fourth biggest producer of chemical products in the world (Cefic 2012). 24 percent of the industry's turnover was made by specialised chemistry (*Spezialchemikalien*), 19,5% by pharmaceutical products and 19,5% by polymers (VCI 2013a: 12).

The chemical industry counts as the paramount example of a high value-added, high-skill and high capital-intensive industry. Control of production process, innovation capacities and technological developments are key for firms' competitiveness in the sector. According to several literature streams which have dealt with outsourcing, these characteristics should make the industry less prone to outsourcing and the use of atypical employment, and keener to retain a highly skilled and well paid²⁷ workforce in a stable employment relationship (Atkinson 1985, Kalleberg 2003). Furthermore, the incidence of labour costs on the industry's cost structure, which is lower than in other industries (in 2012, labour costs represented 12,2% of the industry's business volume, VCI 2013a: 66), makes labour cost savings through external employment less fundamental for competitiveness. Indeed, the chemical industry has historically shown high levels of vertical integration. According to Kinkel and Lay, in 2001 the German chemical industry performed 81% of development activities and 85% of production activities in-house (Kinkel and Lay 2003: 8). This strongly contrasts with other branches,

According to the VCI, in 2011 the average gross monthly wage of an employee in the chemical industry was 4,217 Euro, around 650 Euros more than the average in the manufacturing industry (3,565 Euro) (VCI 2013: 65).

such as automotive, where levels of vertical integration are much lower (less than 30%) (Kinkel and Lay 2003: 5).

However, since the Nineties the industry has undergone processes of profound reorganisation. Service activities have been expelled from chemical companies and concentrated in specialised service providers (Kaedtler 2006, Voss 2007). A new business model, that of industrial parks has emerged, where different firms share a common infrastructure administered by a site operator which provides them all services which support production (Aiche 2011). These processes have produced a significant pressure on wages for workers employed in less skilled functions, such as logistics, maintenance and catering. This pressure has translated into a significant wage segmentation within formerly unitary structures and in the development of differentiated employment conditions for different workforce groups. This chapter aims at reconstructing how trade unions and employees representatives have responded to these pressures and towards which groups of employees they have focused their strategies. For doing so, we will present evidence both at sectoral and at plant level.

The chapter unfolds as follows. First, we will present the characteristics of the vertical disintegration process at sectoral level and how did trade unions and works councils respond to the challenges they posed. Secondly, we will look at the cases of two chemical sites and reconstruct vertical disintegration patterns and the responses of employees' representatives. Lastly, we will sum up the empirical finding by identifying the strategies adopted by employees' representatives.

4.1. Vertical disintegration in the chemical industry

Over the last decades, the German chemical industry has undergone important processes of restructuring. This was triggered by two key developments taking place over the last 40 years. First, the chemical industry has been exposed to increasingly competitive markets. This derived most of all from new producing countries (such as China and India) entering the business, particularly in the

petrochemical and ground chemistry sector (Kamakura 2006: 15ff.). This has made European companies less competitive in those business segments, triggering their concentration on more lucrative and specialised ones. Secondly, the industry has increasingly oriented on business models focused on short-term goals and on the maximisation of shareholder value (Kaedtler 2006). This tendency came as a consequence both of the increased importance of financial investors in the industry and of the capacity of the financial market to orientate managerial norms and visions of what constitute effective business strategies (Kaedtler and Sperling 2002, Becker et al. 1999a, Salento and Masino 2013). These imperatives translated into new forms of company's organisation geared towards the transformation of fixed into variable costs, the concentration on core competences and the contracting out of support functions.

Within the German chemical industry, restructuring took place in two major respects (Kaedtler 2006). First, we have assisted to the creation of chemical parks out of formerly unitarian production sites. Chemical parks are multi-company structures where different companies operate, using shared services and utilities (Aiche 2011: 44). The first examples of this business model were developed during the 1990s in Eastern Germany, where formerly state-owned chemical conglomerates were organisationally split up for privatisation (Voss 2007: 4). Since the end of the 1990s, however, almost all major corporations in the chemical industry followed on to this trajectory in differing degrees. According to the business organisation of the chemical industry, VCI, 37chemical parks are present on the German territory (VCI 2013b). They host around 1,000 companies and employ around 235,000 workers, roughly 60 percent of chemical occupation in the country (VCI 2013b).

Chemical parks have grown because most chemical companies (with the major exception of BASF, as we will see later on) have abandoned the traditional model of integrated chemical production and its emphasis on broad production portfolios. Instead, they have concentrated their activities on some specific business segments (usually the more profitable ones, like life sciences, pharmaceuticals and specialised chemistry) (Becker et al. 1999b: 19ff., Voss 2007: 3). Thus, they have sold or closed less profitable activities, opening up their production facilities to the

settlement of external companies. Thereby, traditionally self-contained production sites (*Verbundstandorte*) have been transformed into multi-company sites, where different companies operate using a common infrastructure, shared services and utilities (Aiche 2011: 44). The most extreme case in this respect, as we will see further on, is the case of Hoechst. As a consequence of the company's new orientation on the life-science business, Hoechst was split up in several segments, which were subsequently sold or merged with other companies, producing the end of Hoechst as brand (Kaedtler 2006: 89ff.).

The second area of restructuring, which is partially, but not completely overlapping to the creation of chemical parks, has been the reorganisation of support functions and service activities. Indeed, they have been contracted out to newly grounded specialised utilities providers (Voss 2007: 4). This took place for two main reasons. First, the presence of several autonomous companies in place of a unitary structure required that new subjects took charge of the common infrastructure shared by chemical companies. Therefore, site operators were created as organisationally autonomous entities for the administration of the chemical parks. They provide companies all services needed for production, from wastewater treatment to energy supply, from logistics to security (Voss 2007). These functions were formerly provided in-house by respective divisions of the traditional chemical company. Usually, site operators are the product of the separation of these divisions out of the former owner of the production site. For example, the chemical parks originated by the splitting up of Bayer production sites are, as we will see further on, administered by Currenta, which was built out of the externalisation of the "central functions" division of Bayer. A second reason, however, has been cost containment. Indeed, chemical companies increasingly considered the internal provision of service activities and support functions (such as maintenance, logistics, catering and cleaning) as too expensive in comparison with the prices available on the external market. As we will clearly see in the plant-level cases, restructuring processes were undertaken mostly for enabling companies to bring the costs of service provision in line with market prices. Thus, chemical companies have progressively externalised the provision of those services and dismantled their service divisions. The latter have either been sold to external companies or

concentrated into autonomous subsidiaries.

Over the last 10 years, pressures for cost containment have involved also site operators and have triggered similar adjustments and consolidation processes focused on the concentration on core-competencies and the contracting out of noncore activities (Festel and Wuermseher 2013: 65). This was especially the case with regard to services of more generic nature. Indeed, an important distinction exists within the service portfolio of site operators. Services can be distinguished between on-site and off-site services (Festel and Wuermseher 2013: 62) or monopoly and voluntary services (Voss 2007: 20). Among the monopoly services are wastewater treatment, energy generation and distribution, steam generation and distribution, fire brigades (Festel and Wurmseher 2013: 62). They are strongly linked to the site's infrastructure and, typically, are services which every company in the site has to buy from the site operator by virtue of their settlement agreement. The latter comprise maintenance, logistics, analytics, security and technical services (ibid.: 62). They are independent of the existing infrastructure and can be purchased also on the market. Thus, while monopoly services are less exposed to price competition, since they are removed from market mechanisms (chemical companies are compelled to rely on site operators for their provision and competitors are relatively few), the voluntary services are directly benchmarked with services provided by external suppliers (IGBCE 2010: 23). Often, external suppliers have a competitive advantage because they do not apply the chemical collective agreement, but collective agreements of other branches or no collective agreements at all. In order to reduce service provision costs and bring them in line with market ones, several site operators have outsourced the supply of voluntary services to external companies or autonomous subsidiaries (Voss 2007).

Still, even if less pronounced, cost-cutting pressures exist also for monopoly services, since park operators compete among themselves for new investments and settlements, and, thus, have to keep operational costs at a competitive level (Interview 13). Indeed, chemical companies compare different parks with regard to the costs of utilities, such as water, steam and electricity provision, fire brigades, etc. (Festel and Wuermseher 2013: 62ff.). Thus, also within monopoly services there have been pressures for cost containment that, as we will see further on, had

important consequences for workers employed in those area.

Lastly, vertical disintegration also took the form of an increased use of agency workers. Comprehensive data on agency work in the chemical industry are difficult to obtain and one can rely often only on survey data. Generally, it is assumed that agency work plays a less relevant role in the chemical sector than in other manufacturing industries (such as in the automotive one). However, according to the data coming from the WSI Betriebsraetebefragung, in 2010 55,9 percent of the German chemical companies employed agency workers. The level was 61,4 percent in 2008 but declined in 2009 to 46,9 as a consequence to the crisis. 6,9 percent of those firms make an intensive use (more than 20%) of agency work. Agency workers usually remain 8,2 months in chemical companies. In those firms which make an intensive use of agency workers, the average deployment time rises to 9,8 months. A new survey among works councillors of 46 chemical companies shows similar results with regards to tenure times (for half of the interviewed companies more than 36 weeks) (Jungvogel 2013). According to the survey, agency workers are mostly used in production and logistics activities and grouped between the levels E3 and E9 of the DGB collective agreement (Jungvogel 2013). Those levels corresponds to levels above the E4 of the chemical collective agreements, and are, thus, near the level of a skilled worker (Facharbeiter).

Industry informants also suggest an increased importance of agency work in the German chemical industry (Interview 9). Moreover, agency workers are not assigned just marginal activities, but increasingly also highly qualified ones (Interview 9). According to a trade unionist, indeed,

Today, we have the situation that even for laboratory personnel, for professional occupations, one can buy people from an external company. Because, I tell you again, agency workers which are deployed in our sectors, they have a very high qualification level. It is not simply, that they stand there and pack something, or transport something from a hall to another, and they need high qualifications (Interview 9).

All the developments described above have increased chemical companies' reliance on external employment. According to the VCI, today, external employees weight 3,8% on the industry's cost structure²⁸ (VCI 2013a: 96).

According to the VCI, this sum is composed by the costs for wages (*Lohnarbeit*) provided by external companies (1%), industrial and technical services (2,4%) and agency work (0,4%) (VCI 2013a: 96).

4.2. Industrial relations under vertical disintegration

The processes of vertical disintegration have put the chemical union and its works councils in front of major challenges. First, management in newly grounded service companies started to pressure for wage reductions or increases in working time in order to line up the cost of service provision to market levels, and, thereby, to be competitive with external service providers and with other site operators. According to a trade unionist,

a crucial element for us as trade union is that it is exercised a massive pressure in employment and working conditions, on wages, because now site operators constantly argue, "we are no more the chemical industry, we are service providers. And in the service sector one has to consider very different prices, one has to set very different prices with regard to the chemical industry (...). And this is always the problem, that they argue, that certain services are offered on the market at cheaper prices with regard to our collective agreement (Interview 13).

This put collectively bargained standards under strong pressures. However, this mostly concerned service activities, since they are more exposed to market competition, wage costs have a higher incidence on total production costs than in production companies and the competitors usually apply collective agreements of other industries (Interview 13). Table 2 below gives an idea of the differentials between diverse collective agreements signed by DGB unions.

Table 2. Collective agreements DGB unions

	Compensation			Weekly working	Leave days	Yearly extra	Extra vacation
	Lower	Mid	Higher	hours		money	money
	group	group	group				
Chemical	2285	2676-	5355	37,5	30 WD	95% MW	20,45€ LD
industry		3104					·
Metalworking	2042	2413-	4205-	35	30 WD	25-55%	2,4%
industry		2808	5257			MW	MW/LD
Transport	1726	1917	1984	39	27-30 WD	30-40%	14€ LD
industry						MW	
Hotel and	1414-	1906	2905	39	25-30 WD	50% MW	200-240€
catering industry	1535						
Cleaning	1490	2186	2518	39	28-30 WD	none	none
Agency sector	1242	1640	2760	35	24-30 WD	150/200/3	150/200/3
					(1)	00(2)	00 (2)

⁽¹⁾ depending on the industry they are deployed

note: if not otherwise specified, reported date refer to the collective agreement of Nordrhein-Westfahlen.

Source WSI 2013

⁽²⁾ after 6 months/in the 3rd 4th year/after 5 years

WD: working day; MW: monthly wage; LD: leave day

As one can see, from the table, the chemical collective agreement pays significantly higher wages and grants more generous benefits than any other collective agreement. Looking at the middle pay grade, even the metal collective agreement sets wages at a level around 10% lower than the chemical sector, while the transport and hotel and catering industry are 30% below and the agency sector even 40%. Also in terms of yearly bonuses, the chemical collective agreement is much more generous than other DGB collective agreements. Lastly, the chemical industry envisages negotiated benefits (such as shift allowances, old-age flexible time) unknown in other industries (Interview 9).

Moreover, multi-enterprise sites raised challenges for works councils codetermination. Indeed, these new structures have made it difficult for works councils to keep control over a wide range of issues formally falling under the Codetermination Act, but increasingly subject to the control of external companies and especially of the site operator (IG BCE 2010: 34). This concerns especially issues related to social facilities, health and safety provisions, work environment, which are often regulated into settling contracts between the site operator and settled companies (IG BCE 2010: 34). Thereby, they are removed from the control of the works councils and their codetermination rights.

However, these pressures were generally managed in a consensual fashion by the social partners according to the long tradition of social partnership which has marked the industry since the 1970s (Markowitz 1985, Kaedtler and Hertle 1997). As we will see in greater detail below, the most important goal of the union and the works councils was to keep all newly established service companies under the chemical collective agreement (IG BCE 2010).

And therefore it was also the main duty of the union to convince these companies' new owners to continue to apply the collective agreement, that was previously applied by Hoechst, namely the collective agreements of the chemical industry (interview 9).

This goal had to be played against employers' willingness to have a specific collective agreement for companies providing services to chemical companies and, above all, for site operators. As argued by a trade unionist,

we are particularly satisfied with the fact that we have been able by now to hinder that site operating companies, that they get a specific collective agreement for site operators. It is a goal of several managers of site operators to have a specific collective agreement, but by now, and hopefully it will remain like this, all employees of site operating companies remain within the domain of the chemical union and are applied the chemical

collective agreement (Interview 13).

However, the union strongly opposes this option sustaining that all activities within the parks have a relationship with the chemical industry and this relationship has to be maintained.

We belong to the chemical industry (...), we all come from the chemical industry, we are experienced in the chemical industry, same in which occupation we are [and] therefore we have to keep the relationship with the chemical industry (Interview 1).

For doing so, new instruments were bargained in order to enable service companies to remain within the representation domain of the chemical social partners and, at the same time, to adapt their cost structure to that of external competitors. According to a trade unionist,

sometimes, for keeping the jobs, we have made use of certain flexibilisation instruments, in order to ensure that the colleagues employed by these site operators remain still within the domain of the chemical collective agreement. But with compromises, for example with regard to working time or to certain pay structures (Interview 13).

First, a specific opening clause (competing collective agreements opening clause, Tarifkonkurrierende Oeffnungsklausel) was bargained for those companies or company segments which found themselves in competition with companies applying other collective agreements. According to this opening clause, in cases of economic difficulty due to this reason, the social partner can negotiate a temporary reduction in collectively agreed standards for strengthening the company's competitiveness²⁹. Second, the social partners introduced the possibility to negotiate special plant-level collective called agreements (so unternehmensbezogener Verbandstarifvertraege), which allow to deviate from the sectoral collective agreement, while remaining part of the employers' association. Differently from the opening clause, which is a temporary instrument, these company-specific agreements do not have time limitations and can be bargained permanently (Interview 9). As we will better see in the plant-level case studies, through these instruments the union was able to keep service companies inside the chemical collective agreement, even if this had the price of reducing wage levels for some segments of the parks' workforce (IGBCE 2010).

According to the employers' association BAVC "for the improvement of the competitive capacity lower compensation rates and other derogations can be bargained through works agreements (*Betriebsvereinbarung*) (with the consent of the collective bargaining partners) or through company agreements (*firmenbezogenen Verbandstarifvertrag*)" (BAVC 2013).

With regard to agency work, the IG BCE has bargained a collective agreement with the two major employers associations of the agency sector in 2012. The agreement sets additional wages for agency workers employed in the chemical industry that have to be paid by agencies on top of the sectoral wage levels. The bonuses range from 10 to 50% of the respective level of the agency sector's collective agreement and depend on the length of agency workers' assignment and their job level (for lower job levels, bonuses start from 15% after 6 weeks and reach 50% after 9 months, for middle levels they range from 10% to 35%, no bonuses are foreseen for higher wage levels, see the table below). Their aim is to reduce pay gaps between agency workers and direct employees. However, these bonuses never reach a complete pay equality, because a ceiling is set at the 90% of the salary of a comparable direct employee and agency workers do not get other benefits negotiated at plant-level (Jungvogel 2013).

Table 3. Additional bonuses for agency workers

Job levels agency sector	After 6 weeks	After 3 months	After 5 months	After 7 months	After 9 months
E1 and E2	15%	20%	30%	45%	50%
E3 to E5	10%	14%	21%	31%	35%
E6 to E9					

Source: Jungvogel 2013.

According to an informant, the logic of this agreement for the union was that the bonuses should contribute to avoid that chemical employers use agency workers as a permanent instrument of personnel policy by making agency work more expensive (Interview 9). According to a trade unionist, indeed,

we want to make it more costly, because our idea is that thereby, if it remains cheap, it will arise a certain pressure on stable jobs, because many agency workers, especially in our industry, in the chemical industry, they are not unskilled workers, that simply drive a fork lift. Instead, they are hired also for high-quality production processes. And there might arise a pressure, if agency workers are similarly good or exactly as good as stable workers. Then, companies would get even more the idea to increase the number of agency workers and to reduce that of stable ones. And therefore we have said, politically, also as IGBCE "Yes, we are for flexible assignments, we cannot impose to a company to hire 500 stable workers for a six months contract, there one can employ agency workers or fixed-term workers, but this cannot be a permanent condition". And in order to avoid it, that firms calculate right from the beginning, "we take 20% agency workers and only 80% stable workers", in order to avoid this we have negotiated these additional wage bonuses with the employers' associations of the agency sector, [so that] a chemical company may argue "it is almost unworthy to use agency work, than I prefer to take

stable workers, they are more motivated". This is the background. Whether it will function, we have to wait 2-3 years to understand whether the pressure, the material pressure is so big, through the increase in price of agency work via these bonuses, that we get again stable jobs. But we still do not know that (Interview Weber).

Here, we see one of the hypothesised logics of union inclusion at work. Indeed, the union has decided to act in favour of agency workers (by improving their wage levels) in order to protect chemical workers from possible competition by an external (and cheaper) source of labour.

4.3. Plant-level case studies

We now turn to the single plant-level studies in order to clarify how employees representatives have responded to vertical disintegration processes. In each of the two cases, the first part of the paragraph is devoted to the reconstruction of the outsourcing processes which gave rise to the park and the constitution of a multi-company setting; how employees representatives responded to these challenges; and how wages and working conditions were affected by these processes. The second part of each paragraph analyses the single companies settled in the park, which role did vertical disintegration play within each of them and how the respective employees' representatives have regulated the issue.

4.3.1. Industrial park Hoechst

The industrial park Hoechst is the outcome of the disintegration of Hoechst's former main production site in the Hoechst district of the city of Frankfurt (Kaedtler 2006: 89ff.).

Hoechst's restructuring process started in 1994, with the definition of autonomous profit centres and the decentralisation of managerial responsibility to the single business units (Becker et al. 1999b: 14). In 1997, the company was transformed into a management holding. The management presented these developments as aiming to make the economic situation of each business segments more transparent for being able to identify unprofitable segments of activity. Moreover, this

restructuring aimed at identifying core competences where investments should focus on (Becker et al. 1999b: 16). In the following years, the holding increasingly concentrated on the "life science" business (pharmaceutical products and agrochemistry), recognised as more profitable than the traditional industrial chemistry and less vulnerable to market fluctuations (Kaedtler 2006: 98). According to the former head of the company, Dormann, the life science business is "virtually not affected by changes in the business cycle as the industrial sector and delivers higher margins"³⁰ (Dormann 1997, cited by Kaedtler 2006: 98). The divestment from industrial chemistry started in 1995, with the sell of the ground chemicals department to the Swiss company Clariant and continued in the following years, with other selling and the construction of joint-ventures (Becker et al. 1999b: 17). This process of selling and divestment also produced the fragmentation of the production site into different companies and the growth of a multi-company setting. To manage this new organisational structure, a service company was created in 1997, where all support functions once performed in-house by Hoechst were outsourced (see below for further information).

In the year 2000, the merger of the life-science business with the French company Rhone-Poulenc into Aventis marked the end of the Hoechst holding.

From the formerly unified structure which employed 25,000 employees, an industrial park was created, where 22,000 workers are employed by around 90 companies. As one can see from the table, these companies have different dimensions ranging from small offices of lawyers or consultants employing just a few people to large production companies employing several thousands of workers (Interview 2). Today, the major production companies settled in the park are Sanofi (8,000 employees), Celanese (1,670 employees), Clariant (1,500 employees) and Bayer Crop Science (680 employees), while the major service providers are InfraServ Hoechst (1,900 employees), InfraServ Logistics (530 employees), Bilfinger Maintenance Sued (800 employees) and H&R Industrierohrbau. According to a works councillor, around 40 of the companies settled in the park have a works council (Interview 2).

According to a works councillor, this was the system followed by all other companies in the park thereafter. Every company was willing to keep just the most profitable segments in their portfolio and to abandon the others (Interview 1).

Table 4 below summarises the current situation.

Table 4. Overview industrial park Hoechst

Industrial park Hoechst	Company	Area of activity	Number of employees	Collective agreement
Main production	Sanofi Aventis	Pharma (Insuline)	8000	Chemical
facilities	Celanese	Intermediate chemistry	1670	Chemical
	Clariant	Speciality chemicals	1500	Chemical
	BMS	Crop protection	680	Chemical
Main service	InfraServ Hoechst	Site operator	1900	Chemical
facilities	InfraServ Logistik	Logistics	530	Plant level agreement (IGBCE)
	Provadis	Training	150	Chemical (with opening clause)
	Bilfinger Mintenance Sued	Maintenance	800	Chemical (with opening clause)
	HR Industrierohrbau	Maintenance	200	Unknown
	Eurest	Catering	160	Not chemical (possibly catering)
	Siemens	IT	Around 300	Metal
Reported companies			15930	
Total companies	90		22000	

An important consequence of this new structure has been the increase of costcutting pressures on service providers. The restructuring process, indeed, enabled chemical companies to freely access the market in order to acquire the services they need for their production process. The presence of cheaper external service providers for some of these services (and especially less specialised services, such as security, catering, cleaning and logistics) has triggered a downward pressure on prices from clients to service providers. As we will see in more detail in the single cases, this pressure has been often translated by the management of service companies into a pressure on personnel costs and into requests for concessions with regard to wage levels and working conditions (IG BCE 2010: 30). The relationship between the introduction of market mechanisms in place of hierarchical relations and the pressures on wages arisen in service providers has been well expressed by a

works councillor. He argued

there [among voluntary services] they squeese even harder, because there client companies have always the possibility, if the prices of the InfraServ do not suit them, to say "I take the services from the outside" (...). This goes to the expense of workers (...). Because they are always optimising processes in order to reduce their costs, but often they have no other solution, as to save personnel costs" (Interview 2).

Through this process, chemical companies can adjust their cost-effectiveness and increase their profitability. However, this happens at costs of service providers. As argued by the works councillor of the site operator, "this profit maximisation at our costs, that we feared in 1998, it has actually taken place" (Interview 1).

The role of workers representatives

According to the chair of the biggest works council in the park, both the works councils and the IG BCE "played no lucky role" in the restructuring process (Interview 2). Indeed, they were not able to substantially influence the restructuring process and to avoid it. Reasons for this are twofold.

According to several works councillors, there was no possibility to avoid this process ("the possibility to prevent this process was not at hand", Interview 1), since works councils lack co-determination rights with respect to restructuring and re-organisation. Indeed, according to the German law regulating co-determination (the Works Constitution Act), restructuring decisions constitute a management prerogative, which works councils have no legal instrument to influence (Interview 2, Interview 1).

However, works councillors also highlight another reason for this lack of influence. According to their opinion, there was a substantial agreement of some part of workers' representatives (and especially those sitting in the supervisory board) with the managerial perspective according to which it was necessary to restructure the company in order to regain competitiveness (Interview 2, Interview 1).

Similar mechanisms were at hand also in subsequent outsourcing phases which concerned most of all the site operator (see below for further information). On the one hand, the works councils lack of codetermination rights impeded to exercise influence through an institutionalised way. However, no other instruments (such as

mobilisation) were adopted. This depended to an acceptance of outsourcing as beneficial for some parts of the workforce. The following quote describes the case of the outsourcing of InfraServ Logistics from the site operator InfraServ Hoechst³¹.

Interviewer: Did the InfraServ Hoechst works council influence the [outsourcing] process? And if yes, how?

Respondent: The works council took the transition mandate³². Influenced in another sense, they did not do it voluntarily. They also have got pressures, they had to outsource the InfraServ Logistics, or they had to bargain another collective agreement for the InfraServ with lower standards. (...) So they have said, logistics has to go out. And they have in the sense, that they have exercised a transition mandate until we built a new works council.

Instead of impeding restructuring to take place, employees representatives ensured that all workers maintained their existing working conditions after the transfer. According to a works councillor,

At time of the outsourcing we have relied on article 613a. Everybody gets into a new employment contract with all he has at the time. Everybody gets his backpack, gets individually all his sectoral and plant-level agreements, rules, and goes to the other side of the street. Afterwards, he has one year protection, and after one year, provided that a works council has been elected, one can discuss collectively all these agreements. The have to be re-collectivised and than I as works council have the opportunity to undertake changes. All outsourcing processes which have taken place here, have taken place according to this scheme (Interview 1).

However, it was not just the protection of individual rights that concerned works councils and the union. A further goal was to ensure that the new companies apply the chemical collective agreement (Interview 2, Interview 1; see also Kaedtler 2006: 113).

We have always tried, as far as possible, to maintain the companies within the chemical collective agreement (Interview 13)

This was especially problematic for companies providing industrial services, which, as we have seen, have to face a fierce competition with external providers not applying the chemical collective agreement. In order to be able to keep these companies under the chemical collective agreement, employees' representatives accepted several forms of wage reductions, from the removal of over-tariff payments to derogations of the sectoral collective agreement (Interview 1, 2, 3, 4,

This is the point of view of a works councillor of InfraServ Logistics. However, as we will see further on, this opinion was shared also by the chair of the InfraServ Hoechst works council.

According to a transition mandate (*Uebergansmandat*), the works council of the parent company represents the workforce of the new company for a specific time frame.

9). This enabled works councils and the union to keep (almost) all companies within the IG BCE representation domain. Still, as we will see below, this happened at costs of a significant fragmentation of wage levels among companies settled in the park.

It is important to note that, even though the ability to maintain a unitary representation and collective bargaining structure was primary a consequence of works councils' struggles, our interviewees recognise that also employers had an interests in this. Indeed, even though works councils highlight the efforts they made ("This costed some strength" (Interview 2); "It did not came from heaven, we are working on this since years" (Interview 1), they also highlight employers' role. According to our interviewees, chemical employers are interested in sustaining the collective bargaining unity of the park and the presence of the IGBCE as the sole representative of the workforce because of two reasons. First, the IG BCE and its works councils ensure a peaceful environment and the possibility to work without stoppages due to strikes. Secondly, they are reliable partners, able to understand the economic dynamics of the industry and to act accordingly (Interview 1, 2, 3, 4, 6, 9). Therefore, employers are willing to pay the price of applying the chemical collective agreement. According to a manager

the chemical collective agreement is surely one of the highest we have in this country. But the IG BCE is a trade union whose leadership contributes to shape things here, within the chemical industry, with a lot of expertise and a sound common sense. This is for me strongly preferable rather than having to do with any crazy trade union, that, completely aside from any reasonableness, comes with any idea and than one has to struggle for months. In return, I rather pay higher wages, but at least I have peace within the company (Interview 6).

Similarly a works councillor argued

when you have a structure such a chemical park and you have everything under the chemical union, but you have a central position, such as catering, the NGG or maintenance, IG Metall, or security, ver.di, the likelihood of strikes is much higher, than if you have just one trade union. (...) And you know, they are much more willing to strike, than we as IG BCE are (Interview 2).

Still, works councillors in service companies highlight how the continuous pressure on wages deriving from chemical companies' pressures on service providers risks producing resentment among workers and may potentially threaten the representation monopoly of the chemical union (Interview 1, 3, 4).

If, due to optimisation programs, they start to question this system or to put it under such

a pressure, that at some point workers say "I don't feel represented by the IG BCE, I go somewhere else". Than it gets fun (Interview 1).

Thus, production companies' purchasing strategies are potentially undermining the basis of peaceful industrial relations in the park.

Representation structure and site cooperation

With regard to representation structures, the decision of the works councillors at the Hoechst industrial park was to develop autonomous works councils in every firm. Again, this decision was partially due to the lack of alternatives (the possibility to construct group works councils, *Gemeinschaftsbetriebsraete*, derives from the reform of the Works Constitution Act), but also from specific choices of the works councillors. This is evident from the contradictory statements of two works councils.

At that time, the institute of the group works council (*Gemeinschaftsbetriebsrat*) was not there. At that time, the Works Constitution Act was designed in such a manner that "one company, one works council". What we sometimes do today, that we represent also subsidiaries, that we can build group works councils, that was at that time still not foreseen by the Works Constitution Act (Interview 1).

There was never a site works council. Instead, the companies have suddenly all fallen apart and everybody has started to build its own works council and it was never undertaken the try, neither from the management side, nor from the works council, to build a site works council. One could have done that. Bayer in Leverkusen, for example, they have such a construction (Interview 2).

Also the evaluation of this decision varies according among the two works councillors. According to the chair of the Sanofi works council "thereby it was basically pre-programmed, that the single companies (and thereby certainly also the situation of the employees) would have been dealt with in completely different ways. And this is what indeed happened" (Interview 2).

According to another works councillor, instead, this decision

has pros and cons. The disadvantage is that the bodies get smaller and smaller, and under certain conditions (...) the capacity to assert oneself is somehow affected (...). However, it has the advantage that thereby you do not have segments of the company, such as for example the logistics, which drive everything down, and than one has to accept compromises for the whole workforce. At the end of the day, what is best, I am myself not sure, I still do not have a sure opinion. However, if I look to what has happened by Bayer in order to keep the whole structure together, which compromises they had to undertake, it gets somehow borderline. Than better one company, one works council" (Interview 1).

Both of them link the absence of a common works council to the subsequent differentiation of working conditions between the different companies. The evaluation depends on the willingness to accept segmentation of working conditions. It seems by no chance that the more critical to this choice was the works councillor in a stronger position (i.e. representing workers of a production company with high operational margins, where cost-cutting pressures were not at hand). On the contrary, the works council of the service provider, immediately touched by cost-cutting processes, was more available to accept segmentation.

In order to coordinate their activities, the works councils in the park have built up a site committee composed by works councils of the different firms, which meets 2-3 times a year in order to discuss themes which are common for the whole industrial park. However, the committee does not enter the kind of issues which determine competition among firms or top-down pressures on wages (Interview 1). According to a works councillor, it is impossible to deal with that kind of issues through union interventions. Indeed, it is the structure of the relationship between the different companies to determine pressures on service providers and no union intervention can possibly solve the issue.

Interviewer: I was wondering whether there are cooperation structure which could deal with these issues?

Respondent: You cannot deal with these issues, you cannot solve them. Because you have interest divergences. We are all trade union members and in principle we all agree, that this development is insane. Because this development can, at some point, also get to others. One can ask what is chemistry? Is it solely what takes place in the reactor? (...) And what happens before? What happens afterwards? (...) Does marketing belong to the chemical industry? Should one pay chemical rates? (...) And therefore one has to be careful with this logics of the employers, because employers differentiate between services and chemical industry because of this reason (...). We have to be careful also as organisation. But we alone do not solve this issue. Also, the colleague (name) works in a company which is our client. And even though the colleague (name) says "ok, the ϵ 3,50 which we pay to you more, they will not kill us. The colleague (name), however, has a colleague which works in the purchasing department, that is evaluated according to the prices he gets from the suppliers. At the end of the year, these determine whether he is a good or bad purchaser. What will he do? He will crush us and give the order to someone else (...). And even though we all agree that this is bad, in so far we are in these mechanisms we cannot change anything. Because the Euro he saves from our order, goes directly in the profits and under some conditions corresponds to 1, 10, 50, 100 jobs for the works council in the company. Therefore, we can only understand each other (...). But we cannot do much more. I think we have to be honest. Everybody stands for himself and has to look how to get the best out of the conditions of his company" (Interview 1).

Summing up, we can describe employees' strategies as both inclusive and

segmentalist, because they produced a strong segmentation of working conditions while maintaining a formally unitary structure. Moreover, as we will see in the single cases, the strategy of employees' representatives sometimes entailed the kind of trade-offs highlighted by Palier and Thelen, i.e. the willingness to protect core workers, by letting cost-cutting pressures apply solely to outsourced workers (see the case of InfraServ Hoechst).

We now turn to outsourcing processes and works councils' responses in a selection of firms settled within the park.

Clariant

Clariant is a multinational company which seats in Muttenz, Switzerland and employs worldwide more than 21,000 employees (Clariant 2013). In Germany, Clariant has 15 production sites (interview 8). Clariant's production site in the industrial park Hoechst constituted the specialised chemistry department of the Hoechst AG and was sold to Clariant in 1997. At that time, the company counted 3,000 employees. In 2000, due to a phase of financial difficulties, the company sold some operations, which constitute now autonomous companies settled within the industrial park (Interview 8). Today, the production site in Hoechst employs 1,500 workers and is Clariant's largest production site in the world. The plant is specialised in the production of pigments and synthetic waxes. Since fall 2013, Hoechst is the central Research&Development centre of the company with 500 workers.

Pay setting system

Clariant is a member of the employers' association and applies the chemical collective agreement. Clariant employees have also right to additional pay and benefits set by company-level agreements (*Betriebsvereinbarungen*) negotiated by the works council.

Agency work and subcontractors

At the time of the interview 35 agency workers were employed at Clariant. According to the deputy of the works council, they are employed in easiest production functions (as production assistant, *Produktionshelfer*) in order to cope with production peaks, or to substitute direct workers on holiday or maternity and sick leave. Those activities do not require them to possess a vocational training (Interview 8).

Since 2007, the use of agency work is regulated through a company-level agreement bargained by the works council. In particular, the agreement settles the following questions:

- ³⁵ Quote: the maximum number of agency workers is 50. This number is calculated as an average on a monthly base.
- Assignments: agency workers cannot be employed in specialised activities (such as machine operator, *Anlagenfahrer*), but solely as production assistant.
- Wages: agencies which provide agency workers have to apply the collective agreement for the agency sector bargained by the DGB unions and the collective agreement on additional bonuses signed by the IGBCE. Thus, agency workers do not receive equal pay, but the IG BCE additional wages (*Branchenzuschlaege*).

The possibility for the company to make use of agency workers was exchanged with the definition of a clause that obliges Clariant to employ 30% of its trainees (*Auszubildende*) for one year after successful conclusion of the vocational training. According to the deputy chairmen of the works council, this agreement allows 8-10 trainees to remain in the company each year (Interview 8).

The way in which the works council has regulated agency work highlights the fact that the works council does not consider agency work as a problematic issue, as far as it does not enter crucial activities within the plant (thus, the clause that impedes the assignment of agency workers to specific activities). Furthermore, agency work is used as a "bargaining chip" for getting other allowances which benefit core workers.

There are no subcontractors active in on-site production activities at Clariant's Hoechst site, with the sole exception of two people employed for filling activities through a subcontracting agreement (Interview 8). As all other companies in the industrial park, Clariant relies on InfraServ for a wide range of services (both mandatory and voluntary, even though the interviewed works councillor could not tell exactly which ones). Furthermore, the company has a contract with InfraServ Logistic for transport. Internal logistics, instead, is still performed in house. The interviewed works councillor argued that a large part of maintenance services is also performed by Clariant employees (Interview 8). However, Clariant is also a client of Bilfinger Maintenance Sued (BIS 2012), and thus also outsources a part of the maintenance activities to the Bilfinger group. Clariant also employs other external firms for exceptional construction activities (such as pipeline construction). These are mostly craft firms. No plant-level collective agreements have been bargained on the issue of subcontracting.

Bayer Crop Science

Bayer Crop Science (BCS) is a multinational company which belongs to the Bayer holding. Worldwide, the company employs 18,000 workers, 3,500 in Germany. In 2012, the company raised sales for 8.3 million Euros (BCS 2013). BCS production site in Hoechst constituted the crop protection department of the Hoechst AG and was bought by the Bayer AG in 2002. Today, the company is active in crop protection (herbicides, insecticide and fungicides) for agriculture and gardening, and seeds production. In the industrial park Hoechst, BCS employs around 680 workers. 320 workers are employed in research activities (the site is the global research centre for the herbicide business), 300 in production and the rest in administration. All workers at BCS have at least a vocational training in chemical occupation (according to the site coordinator, some workers belonging to the Hoechst AG still have a vocational training in non-chemical occupations (berufsfremde Ausbildung) but they are very few). The company hosts 30-40 trainees per year. However, they are not trained directly, but are trained by a

specialised vocational training company belonging to the InfraServ group, Provadis (see below for further details). According to the site coordinator, this enables BCS to reduce training costs and to avoid the presence of trainees interest representation in-house (Interview 6).

Pay setting system

The company is member of the employers' association of the chemical industry and, thus, BCS workers are paid according to the chemical collective agreement. Moreover, they are allowed additional benefits bargained at company level. Among these benefits are a company pension scheme, a nursery, and a bonus system. This latter is differentiated between lower-level employees (for which it depends solely on company performance) and managerial employees (for which it depends on individual and company performance), and amounts between one and three additional monthly wages (Interview 6). This roughly represents a positive wage drift of at least 8-10%.

The majority of production workers are hired between the levels E6 and E9 of the chemical collective agreement, in research between E10 and E11 (after the vocational training, employees in research activities are grouped at the E7 level).

Agency work and subcontractor

According to the BCS site manager, agency work is mostly used as flexibility instrument in cases of production peaks. Agency workers are employed mostly in production, rarely in clerical tasks. They stay normally for short periods of time in the company, but some of them stay even for 1-2 years. Often they are permanently hired by the company, especially in recent times, since BCS is expanding production and needs further employees (Interview 7). At the time of the interview, BCS employed 10 agency workers. According to a works councillor, they are paid according to the collective agreements for the agency sector bargained by DGB unions. Moreover, they receive the additional payments (*Branchenzuschlaege*) bargained by the chemical union in 2012. Interestingly, the site coordinator argues instead that agency workers are paid the same wage as internal employees and that BCS wants "to pay the same wage for the same work" (Interview 6).

The works council did not bargain any supplementary collective agreement on the issue of agency work, considering it as not being a problematic issue (Interview 7).

Interviewer: Do you have any agreement on agency work?

Respondent: No. By now it has not been necessary. We apply the collective agreement and we pay also, new in the chemical industry, these equalisation standards.

Interviewer: But you do not have any particular regulation at plant level?

Respondent: By now not. (...). There are negotiations currently going on at the level of the general works council³³, but I think this is not such a big issue at our company. (...). Because agency workers are very few. The Bayer corporation has many in the pharmaceutical sector, therefore they bargain there. For us, for BCS, it is less needed (Interview 7).

Here, again, we can see the logic triggering inclusion or exclusion decisions by the works council: Apparently, the works council thinks there is no need to regulate until it does not get a problem for core workers.

With regard to subcontracting, the issue seems to be slightly different. According to a manager, since the development of the industrial park, all technical activities have been outsourced to external companies. As a preference, outsourcing has gone to the site operating companies (i.e. InfraServ), but also to other companies. Today, maintenance activities are subcontracted to Bilfinger. Other activities (such as IT, payrolls, engineering) have been subcontracted to external companies belonging to the Bayer holding, such as Bayer Business Services and Bayer Direct Services (see the Bayer paragraph for further details on pay setting systems in the Bayer holding). Lastly, easiest activities (such as packaging) have been outsourced through subcontracting agreements. With regard to the number of employees working for external companies on BCS premises, the site coordinator argued that the legal construction through which these workers are present on BCS premises (namely through subcontracting agreements) does not allow him to know their number³⁴. According to a works councillor, external employees are now around 20 and are employed in "simple activities, such as packing or preparation" (Interview

Indeed, all agreements on those issues are not bargained directly on site, but for the whole group by the general works council (*Gesamtbetriebsrat*).

The site coordinator argued: "Juridically it is so, that we award an order to do a specific activity to an external company. Within this agreement, this company has the sole obligation to delivered the required result. How this company does that and with how many workers, thereon we have no influence. We cannot exercise an influence, because otherwise we get into conflict with the issue agency work. And therefore I have to tell you very strictly, I have no idea how many workers work for us through subcontracting agreements, because I cannot know that. And also because I have no influence on that. I am not even interested, I am solely interested in the fact that this company delivers the desired result within the desired time" (Interview 6).

7). The company has no collective agreement on the issue, but the works council considers it as critical and argued it will be the next issue on the agenda of the Bayer GBR ("I think the next issue will be subcontracting", Interview 7).

InfraSery Hoechst

InfraServ Hoechst was founded in 1997 as the site operator of the Industrial Park Hoechst. At the time of its establishment, InfraServ contained all indirect functions which were considered as non-core by chemical companies. According to 1,

due to the "core competences" philosophy of the production companies, all they did not need for their business was pushed into InfraServ (...). Thus, we comprised, I say it somehow malicious, all those activities, nobody knew that existed. Because production companies wanted to start as lean as possible (Interview 1).

The activities performed by InfraServ Hoechst ranged from maintenance and logistics, to postal services, a scientific library and the procurement. Since the beginning of its history, the company was exposed to strong price competition with external service providers and client firms' pressures to cost reduction. Indeed, the company seems to be stuck between two contrasting imperatives. According to a works councillor,

On the one hand, our shareholder, our owners want to have the lowest prices. On the other hand, however, the company has to act in a financially efficient way and generate profits (Interview 1).

On the one hand, indeed, the company had to transform once central functions (which, according to the chair of the works council, were appointed according to a pro-rata system) into profitable services that produce revenues. On the other hand, InfraServ Hoechst has to guarantee low prices to its clients, which are at the same time also the company's owners. Indeed, InfraServ Hoechst is owned by the three bigger producing companies in the park, Sanofi, Clariant and Celanese, each owning a third of InfraServ's shares. Thereby, producing companies determine InfraServ Hoechst's functioning. For example, service prices are not determined solely by InfraServ's management, but also by the owners (*Kommanditisten*), which want to keep prices down. Because of this particular structure, thus, on the one hand, the company has to operate services it would not make an economic sense to

operate. On the other, it cannot increase the prices in the potentially more profitable segments, because of owners' veto (Interview 1). This contrasting pressure produces a reduction in operating margins, which has been translated by the management into continuous pressures for cost-cutting in labour costs.

InfraServ Hoechst's management reacted to these pressures through further contracting out especially of those company segments which provided voluntary services. Outsourced activities have been either sold to other companies or put into autonomous subsidiaries. In the year 2000, InfraServ built up an autonomous subsidiary for logistic services (InfraServ Logistics, see below), with around 850 employees (Interview 3 and 4). In 2003, InfraServ Hoechst outsourced its division "Technical services" into the subsidiary Infraserv Höchst Technik GmbH & Co. KG (later bought by Bilfinger&Berger, today called Bilfinger Maintenance Sued, see below for details), with 800 employees. In the same year, a subsidiary was created for training services (Provadis, with 150 employees). This subsidiary is in charge of the vocational training and provides trainees for more than 60 companies, both inside and outside the chemical park (Provadis 2013). Lastly, in 2004 InfraServ Hoechst outsourced it pilot plants division (which designs, plans and operates pilot plants) into an autonomous subsidiary called Technion. From the original 4,700 workers employed by InfraServ Hoechst at the time of its establishment, 1,900 workers have survived those outsourcing waves (Interview 1). However, the whole group, which comprises also InfraServ Hoechst, Provadis, and Techtrion employs around 2,700 workers. The largest part of InfraServ Hoechst's employees are employed at the levels E8-E12, i.e above the level of the skilled worker (Facharbeiter) (Interview 1). Indeed, almost all employees of InfraServ Hoechst are skilled workers trained in chemical occupations.

Today, the company provides services in three areas: site operation (security, facility management, etc.), utilities (electricity, gas, steam) and waste disposal. However, the chair of the works council argued that, due to cost-cutting pressures from the clients, security and facility management may be further targets for outsourcing.

Pay setting system

On of the most important reasons for outsourcing is that it enabled InfraServ Hoechst to cut costs, most of all through a redefinition of wage levels for outsourced employees (Interview 1). The outsourcing produced a fragmentation in employment standards and a differentiation in the pay setting system across the companies belonging to the group.

InfraServ Hoechst is member of the employers' association of the chemical industry and its employees are paid according to the collective agreement of the chemical industry. However, since its establishment, over tariff payments (*uebertarifliche Leistungen*) have been progressively reduced. According to the chair of the works council,

this is a process, which has continuously occurred within the last 14 years. We have been in some sort of cycle: something was cashed, it was sufficient for 2-3 bargaining rounds and than we had to renounce to something again. And now it goes further on (Interview 1).

At the time of the interview (23.05.2013), the only over tariff-payment still paid to the company's workforce was represented by an additional bonus of around half a monthly salary (Interview 1), which represents a positive wage drift of around 4% in respect to the sectoral collective agreement. However, discussions were undergoing on the necessity for the company to enter another cycle of saving measures, which could have possibly meant concessions with this regard (Interview 1).

Different pay systems are present in the three subsidiaries. The 150 employees of Provadis are paid as set in the chemical collective agreement, but work according to a trust-based flexitime (*Vertrauensarbeitszeit*). Instead, since 2002, InfraServ Logistic has a specific collective agreement (see below for details).

Agency work and subcontracting

InfraServ Hoechst does not make a large use of agency workers. At the time of the interview (23.05.2013), the company employed just 6 or 7 agency workers (interview 1). They are distributed all over the company (not concentrated in specific functions), and are mainly used as substitutions of workers on holiday, maternity or sick leaves. According to the chair of the works council, the low

incidence of agency work in the company is due both to its relatively regular business model (InfraServ Hoechst does not have strong fluctuations or production peaks) and to the opposition of the works council against this form of employment (Interview 1). Even though InfraServ Hoechst does not have a company agreement on the issue, indeed, the works council argues it has always acted in a very restrictive manner on the issue (Interview 1).

We do not want agency work. We do not have any plant-level agreement on the issue, but we behave there very restrictively. The management knows that and so do the divisions (Interview 1).

Instead, InfraServ makes large use of subcontractors and in some activity segments the level of vertical integration (Fertigungstiefe) is below 50% (Interview 1). However, the works council did not tell where exactly subcontracting takes place and did not want to name any of the subcontracting companies. He argued that this subcontracting strategy is causing problems with client companies, since the latter are increasingly requiring InfraServ Hoechst to internally carry on at least 50% of the activities they outsource them, in order to ensure they have control of the processes. However, this is seen as a problem by the works councillor, since he argued that the company's management has progressively reduced occupational levels, so that today in some areas InfraServ Hoechst employees perform just coordination activities (Interview 1). This might produce an expulsion of InfraServ Hoechst from some business segments, since client companies might decide to directly contract InfraServ Hoechst' subcontractors for carrying on the activities. According to the chair of the works council, this is what happened with technical services in the past³⁵. However, no plant-level agreement was bargained on the issue. According to the chair of the works council, subcontracting companies do not apply the chemical collective agreement and often apply none.

The works council argues to have a "finger-off" approach to outsourcing (Interview 1). This stance is somehow ambiguous. On the one hand, our interviewee admitted outsourcing was sometimes used as a way to avoid accepting concessions for the whole workforce under the pressure of managerial requests of cost-cutting. As we

[&]quot;The same thing happened also with the maintenance division some years ago, that at some point we simply coordinated external companies. And at some point the client argued: "Am I stupid? The external company provides the service exactly how I need it, what do you do [InfraServ Hoechst] in between?". And this is exactly the risk that always exists if you do not have the competences on your own" (Interview 1).

will see in more detail below, this was the case of the logistics subsidiary of the company, InfraServ Logistics. However, this "finger-off" approach and the consequent refusal of the works council to undertake responsibility for new subsidiaries or subcontractors (according to the principle of joint representation) has sometimes been used as a way to put pressure over the management for avoiding outsourcing. Indeed, due to the fact that social peace within the park represents a great value to chemical employers, the works council's refusal to accompany the process means the risk of being confronted with other, more militant representatives. This risk has been often taken into account during negotiations and has been used as a bargaining instrument from the works council. On this issue, the works council argued

we always argue "if you think you have to outsource, than do that, it is your free decision. But take into account that if you do that, we will split up accordingly: we will build a trade union for the fire brigades, a trade union for security personnel, a trade union for firemen and then we will conduct negotiations for all of them (...). If you want to outsource the security service (...), do that. Then we build a separated branch which will close the doors during collective bargaining round. And then nobody will be able to enter or exit the park. Do that!". Something has changed also in the way in which we argument as works councils. They are no more able to scare us through outsourcing. I had this discussion some years ago with the division manager and I have told to him "do that!". Because he wanted, within the current collective agreement he wanted to go down. I have told to him "I cannot do this, I cannot go under the level of the collective agreement". Then he had a problem, he had to think whether outsourcing was a better solution. Because I told to him "Do that! But you will not get the chemical collective agreement anymore (Interview 1).

InfraServ Logistics

InfraServ Logistics is a fully owned subsidiary of InfraServ Hoechst. The company provides logistics services for the chemical and pharmaceutical industry, both on and off-site. At the industrial park Hoechst, the company employs 530 employees (Interview 3 and 4). 35% of them work in clerical occupations. As for production workers, they are mostly skilled workers, trained in logistics occupations and belong to the CL-G and CL-H groups of the company collective agreement (*Facharbeiter* level) (Interview 3 and 4). Around 50% of the company's employees are member of the IG BCE (Interview 3).

The company was outsourced 1998, because of cost reasons. According to the chair of the mother company's works council, the company was outsourced

with the statement, that InfraServ needed external expertise and that logistic was not the company's core business and that others do that activities better. However, these were all pleaded (vorgeschoben) arguments. The outsourcing took place because they were trying to question the wage setting system in order to cut costs (Interview 1).

This is confirmed also by the interviewed works councillors of InfraServ Logistik. According to him, the process started because client companies considered logistic services performed by InfraServ Hoechst as being too expensive and wanted a reduction in prices (Interview 3 and 4). According to him, the works council at InfraSery Hoechst was told that "Clariant wants a significant reduction of the prices for logistic services (...). Either it goes at the expense of everybody [within InfraServ Hoechst] or we build an autonomous logistic subsidiary" (Interview 3 and 4). Thus, the works council at InfraServ Hoechst agreed to outsource the logistic segment in order to avoid concessions for all the company's employees. According to the two InfraServ Logistic works councillors, the outsourcing was "the lesser evil both for the works council and for the management" (Interview 3 and 4). As we have already seen at the beginning of the paragraph, this is interestingly confirmed also by the chair of the works council at InfraServ Hoechst. Indeed, he argued that outsourcing has the advantage that "one does not have segments of the company, such as for example the logistics, that drive everything else down and which cause one to enter compromises for the whole workforce" (Interview 1).

Today, the company underlies a fierce competition with external logistics companies which do not apply the chemical collective agreement (but usually that of the logistics sector) and have, therefore, much lower personnel costs. According to the works councillors, those firms can save up until 20% production costs (Interview 3 and 4). Moreover, client companies use to define subcontracting agreements requiring constant reductions in service costs. According to a works councillor, "Clariant has imposed us a contract which will last 5 years and requires us to cut the prices of our services by 5% every year" (Interview 4).

Pay setting system

These pressures in production costs have translated into constant requests for concessions in wages and working conditions. In 2002, the company and the local

branch of IG BCE have bargained a company-level collective agreement (*unternehmensbezogener Verbandstarifvertrag*) with lower pay rates and a reduced yearly bonus (75% of a monthly wage instead of 95%). Furthermore, in terms of seniority based wage increases, there has been a movement from automatic wage progressions to variable ones, based on an evaluation of individual performance (Interview 3 and 4). Lastly, the company collective agreement contains a opening clause which, in cases of economic difficulties, allows the management to bargain with the works council over derogations. In 2008, for example, the works council agreed to such a derogation, defining a variable regulation of the yearly bonus which foresaw that until 2012 the company would have paid the bonus only if the company realised profits.

According to a works councillor, without this agreement the management would have contracted out the easiest activities inside the warehouse to small crafts (Gewerke) and to external drivers, which are paid wages of around $\in 8$ per hour (Interview 4). This is much lower than the lowest wage group within the company collective agreement, which lies at $\in 10$ per hour (Interview 3 and 4). Thus, the company agreement enabled the works council to keep these activities in-house.

In February 2013, a new company collective agreement was signed. The goal of the agreement is to stepwise reduce wages at InfraServ Logistics at a level 10% below the chemical industry (Interview 9). This will be achieved through the fact that future wage increases negotiated at sectoral level will be applied to the company's workforce just for 50% of their level. That means that, if the wage increase in the chemical industry is bargained at 5%, InfraServ Logistik employees will receive just 2,5%. Working time is set at 39 hours per week and it has been agreed that future collective agreements which do not deal with salary issues (for example agreements on the management of ageing workforce, collective Demographietarifvertrage) will not be applied to InfraServ Logistik. According to a works councillor this means that the company will progressively distance itself from the bargaining dynamics of the chemical industry. According to the interviewed works councillors, the contract is worse than that of the chemical sector, but it is still between 10% and 20% higher than the collective agreement of the logistic sector (Interview 3 and 4).

Agency work and subcontractors

At the time of the interview, InfraServ Logistic employed 12-13 agency workers (Interview 3). According to the chair of the works council, agency work is used to cover fluctuations in clients' demands and production peaks. Agency workers have the same qualification level of direct employees and perform the same activities. In some cases, agency workers are directly hired by InfraServ Logistics after some time.

According to the chair of the works council, agency workers at InfraServ Logistics are paid according to the equal pay principle. However he did not know whether agencies providing agency workers to InfraServ Logistics were part of the sector's employers association. Moreover, during the interview the works councillor could not say exactly where this equal pay principle came from. At the beginning, he argued that parity came from the collective agreement of the chemical industry (*Manteltarifvertrag*). I asked whether he was referring to the collective agreement on the additional wage bonuses (*Branchenzuschlaege*) signed by the IGBCE in 2012 and he answered positively. This casts some doubt on the fact that agency workers are really paid according to the equal pay principle, since that collective agreement does not foresee a wage parity. Moreover, this uncertainty clearly highlights that agency work is not a crucial topic on the works council's agenda. This seems to be confirmed also by the fact that there is no company-level agreement on agency work (Interview 3).

InfraServ Logistic used to rely on on-site subcontracting (*Werkvertraege*). However, at the time of the interview (20.10.2013) there were no subcontracting agreements, since the introduction of the 39 hours working week (through the new collective agreement) has reduced the company's necessity to rely on external employment. Subcontracting agreements were usually made with craft companies. The chair of the works council did not know how these companies paid their employees (Interview 3). Subcontracting agreements are used both to cover production peaks in the regular business and to perform easier tasks. For example, InfraServ Logistics had for a long time a subcontracting agreement for the packaging of chemical products at client's premises. This subcontracting agreement employed 3 people coming from a craft. However, InfraServ Logistics recently lost

the commission and the subcontracting agreement with this company was ended.

At plant level there are no agreements regulating the issue, thus suggesting that subcontracting is not a crucial topic for the works council.

In 2004, the company outsourced the management of the containers terminal. Indeed, InfraServ Logistik developed a joint-venture with the transporting company Contargo in order to build FIT GmbH (Frankfurt Intermodal Terminal GmbH, today entirely controlled by Contargo and called Contargo Industriepark Frankfurt-Hoechst GmbH), which operates intermodal (sea, train and truck) transportation and on-site container maintenance and repairs. The container terminal was financed by the city council as a measure to reduce unemployment (Interview 3 and 4).

Again, a main issue against further outsourcing is identified by the interviewed works councillors in employers' fear of conflicts. For example, InfraServ logistic is planning to outsource the management of the train transport service. According to a works councillor, a suitable train company it is currently looked for which could take over the business. However, since train transport is a key position (with such crucial positions we could shut down the whole park", Interview 3 and 4), there is a problem of control. According to the two works councillors, this issue often enters negotiations.

Interviewer: Does it bring advantages?

Respondent: In negotiations? I would say so. (...) Even our mother company is forced by the shareholders in that they say "OK, we want cheaper prices, but we also want to work (Interview 4).

Bilfinger Maintenance Sued

Bilfinger Maintenance Sued belongs to the business segment Industrial Services of the Bilfinger SE, a former construction company now increasingly active also in the provision of industrial services. Worldwide, the Bilfinger group employs more than 66,000 employees (Bilfinger 2013). The business segment industrial services is represented by the Bilfinger Industrial Services GmbH. In the year 2012, Bilfinger Industrial Services counted 37,000 workers, an increase of over a quarter

from the 2011 level set at slightly less than 30,000 workers. BIS' continuous growth is due to subsequent mergers and acquisitions. Bilfinger Maintenance Sued is one of those cases. Indeed, until 1997 the company constituted the technical division of the Hoechst AG and, after the creation of InfraServ, became its division "Technical Services". 2003, InfraServ Hoechst outsourced the division in an autonomous subsidiary, Infraserv Hoechst Technik. Exactly as in the case of InfraServ Logistics, this decision was taken because the company was operating at a loss and reductions in personnel costs were deemed necessary (Interview 5).

Interviewer: Why did InfraServ Hoechst decide to outsource this division?

Respondent: Because back then we were for a long time in the red. And then they have tried to... well, we were outsourced in 2003, and then we were for a year, was the company not part of the employers' association, so we passed a wage increase [coming from the collective agreement]. And in 2004 we also bargained the 40 hours week without corresponding wage increase (...).

Interviewer: This means that the most important reason for the outsourcing decision was a reduction of personnel costs?

Respondent: Exactly (Interview 5).

In 2005, the company was sold to Rheinhold&Mahla, part of the Bilfinger group. In 2013, Bilfinger Industrieservice Mitte was renamed Bilfinger Maintenance Sued GmbH (BIS 2013).

The company performs both regular maintenance and emergency stoppages and offers complete packages of technical intervention, which range from engineering know how for the planning of production facilities, to the actual technical and maintenance services. For the regular operations, the company normally bargains long-lasting general agreements (*Rahmenvereinbarungen*) with client companies. Thereby a fixed amount of Bilfinger Maintenance Sued's employees works steadily directly on clients' premises. Shorter contracts are instead bargained either for standstills or for the construction of new production facilities. At the industrial park Hoechst the company employs around 850 workers. Among them, 620 are employed in technical services. All workers have a vocational qualification. Most of the workers are employed between E6 and E8 levels. Technical services are traditional trade union's strongholds. 74% of the company's employees belong to the IG BCE.

According to the chair of the works council, price competition with external service providers is quite high. The main competitors are Zoth GmbH&Co KG und H&R

Industrierohrbau GmbH, both settled in the park and employing respectively 500 and 200 workers³⁶. It is unclear whether they apply a collective agreement, but the works councils argue that, since they do not apply the chemical collective agreement, they pose the company under fierce competition.

Pay setting system

The company applies the chemical collective agreement but the works council has negotiated an opening clause with regard to working time. Already at the time of the outsourcing from InfraServ Hoechst cost reduction was a significant issue. For one year, the newly grounded InfraServ Hoechst Technik did not join the employers' association in order to avoid the yearly wage increase bargained at sectoral level. In 2004 the works council agreed to increase working time from 37,5 hours per week to 40 hours per week without wage compensation. This represented a saving of around 6,3% in wage costs.

A further opening clause was bargained with regard to the yearly bonus. According to the chemical collective agreement, workers are entitled to a fixed yearly bonus corresponding to 95% of a monthly wage. At Bilfinger Maintenance Sued, the yearly bonus has been made dependent on the company's performance and can oscillate between 80% and 120% of a monthly wage. Furthermore, several overtariff benefits coming from Hoechst times (such as bonuses after 25-40-50 years employment in the company) have been reduced to the level set in the collective agreement.

Agency work and subcontracting

Agency work represents an important element at Bilfinger Maintenance Sued. Indeed, the company makes large use of temporary agency workers and around 120-130 are steadily present in the company. This represents around around 15% of the whole workforce. According to the chair of the works council, the company hires agency workers in order to manage production peaks. Indeed, the business model of Bilfinger Maintenance Sued is irregular and dwindling, with a structural

Zoth does not work just at the industrial park Hoechst and has just a production facility in the park. Instead, H&R seats in the industrial park and works mostly for the chemical companies active in the park.

peak after summer (due to the periodical maintenance stops chemical companies have to perform every year) and unforeseeable peaks when new facilities are built. The use of agency workers enables the company to protect the stable workforce.

Through this instrument we manage peaks and throats. At the time in which there was little to do, when there was the crisis, it was 2008 I think, we had no agency workers. But thereby we could also keep our workforce (Interview 5).

As one can clearly see from the words of the works councillor, this buffer function performed by agency work is accepted by employees representatives. Indeed, agency work constitutes for the works council a protection for core employees and a way to protect them from market fluctuations. According to the chair of the Bilfinger Maintenance Sued works council, they are almost exclusively skilled workers, are employed in all activity segments and perform almost the same activities done by regular employees.

They do not perform auxiliary functions. The one or the other yes, I have to be clear. But the largest amount of the colleagues, they are also very good skilled workers and they perform exactly the same tasks of the colleagues here at Bilfinger" (Interview 5).

However, this is not perceived as a problem by the works council, but more as a resource in that it enables this buffering mechanism.

Agency workers usually have long tenure (sometimes even 2-3 years) and are often hired permanently by the company after a period of time (Interview 5). The chair of the works council argued that in the last year, around 50 agency workers were hired permanently by Bilfinger Maintenance Sued.

There are no plant-level agreements regulating the issue of agency work, but the works council exercises control over several aspects of the issue, thanks to the fact that the works council has to approve agency workers' deployment. The issue where most of the works council's attention concentrate is that agencies providing agency workers apply the DGB collective agreements for the agency sector (agency workers are hired from several small agencies active in the region). Thus, agency workers at Bilfinger Maintenance Sued receive the additional wage bonuses bargained by the IG BCE at sectoral level.

According to the chair of the works council, the company has outsourced facility services to other segments of the Bilfinger group, but does not rely on other subcontracting agreements. Thus, this is not an issue for the works council.

Summary

Table 5 below offers a summary of working conditions, vertical disintegration and works councils' strategies within the industrial park Hoechst. As we can see, the disintegration of Hoechst has produced a fragmentation of employment conditions within the park. Even if almost all companies in the park have experienced a reduction in wage levels with respect to those paid by Hoechst³⁷, the largest differentiation occurs between service and production companies. Indeed, even if chemical companies have also progressively reduced the level of over-tariff payments over the last 20 years, they still generally pay above the chemical collective agreement (Interview 8). Service companies, instead, have adopted several forms of pay reduction, which have either brought them to the level of the collective agreement, or have even introduced derogations, such as reduced pay rates or increases in working hours. Still, according to the works councils all companies in the park are covered by the chemical collective agreements. However, the responsible trade unionists highlighted that two exceptions are the catering company Eurest, which applies a house collective agreement negotiated with the catering union NGG, and Siemens which operates the IT-system and applies the metal collective agreements (Interview 9). As the chair of the local trade union branch has argued "with regard to the number of people, this goes for just 500 employees. The rest of the park is covered by the chemical collective agreement" (Interview 9).

However, this argument seems questionable. First, when talking about the collective bargaining structure, interview partners always refer to those firms grown out from the disintegration of the former Hoechst AG and not to newly settled ones. On the contrary, when talking about competitive pressures, works councillors of service providers argue that some of their competitors which do not apply the chemical collective agreements are indeed settled in the park. Secondly, interview partners always talk about firms settled in the park, not taking into account external companies not settled in the park, but which continuously provide services on a contract basis. They usually fall outside the chemical representation

According to a trade unionist, Hoechst had such operational margins, that it was able to pay far above what was set in the sectoral collective agreement. Indeed, the company presented a positive wage drift of around 20 percent (Interview 9, see also Kaedtler 2006). Today, probably only Sanofi is able to pay at a comparable level (Interview 9, Interview 2)

domain and do apply other collective agreements (and sometimes no collective agreements at all). Lastly, there seem to be no great awareness of smaller firms settled in the park (those which do not have a works council).

The fact that workers' representatives neglect these units somehow reveals the implicit idea they have on what represents their constituency. Indeed, even if employees' representatives argue they represent the chemical park as a whole, they in fact concentrate on workers and firms grown from the Hoechst's disintegration. For those companies' segments they have ensured a unitary representation domain. Instead, they seem not to be so worried about the presence of small firms applying none or other collective agreements and of agency workers. Apparently, this is due to the fact that these unions do not constitute a threat to the representation monopoly of the chemical union within the park (Interview 1). Moreover, these workforce segments do not compete with the internal workforce and, thus, provide no incentives for inclusion.

Table 5. Wage segmentation and works councils' strategies at the industrial park Hoechst

		BCS	Clariant	InfraServ	InfraServ Logistics	BIS
Position in the value chain		Final producer	Final producer	Site operator	Service provider	Service provider
Employees		680	1500	1900	580	800
Pay setting Regular workers Subsidiaries		Sectoral agreement + bo- nuses (8-10% yearly wage)	Sectoral agreement + bo- nuses	nus (around 4% yearly wage) agreement (working time 39h and wage 10% below		Sectoral agreement with two opening clauses (work- ing time 40h, flexible yearly bonus)
		BBS and BTS: same sectoral agreement but opening clause Bayer Gastronomie: non chemical	None	See InfraServ Logistics	None	None
	Agency workers	DGB collective agreements + IGBCE additional wages	DGB collective agreements + IGBCE additional wages	DGB collective agreements + IGBCE additional wages	DGB collective agreements + IGBCE additional wages	DGB collective agreements + IGBCE additional wages
	Subcontract- ors	Other collective agree- ments (not specified)	Other collective agree- ments (not specified)	Other collective agree- ments (not specified)	Other collective agree- ments (not specified)	None
External	Agency work	Very limited (10)	Very limited (35)	Very limited (less than 10)	Very limited (6-7)	Intensive (15%)
flexibility	Subcontract- ors	Support services on-site (logistics, maintenance)	Support services on-site (outbound logistics, packaging)	On-site, also core business, in the future probably also facility management	Support services on-site	Support services on-site (facility management)
Works	Agency work	Acceptance	Acceptance in exchange	Restrictive	Neglection	Acceptance as flexibility

councils'			for the hiring of trainees.			buffer
position	Subcontract- ors	Acceptance	Acceptance for peripheral services	Used to avoid concessions for the direct workforce	Acceptance for peripheral services (container terminal)	
Regula- tion	Agency work	No company-level agreement, but control by the works council. Prevalence of internal employment. Application of the IGBCE additional wages	Quota (maximum 50) Hiring just as production assistants Application of the IGBCE additional wages	No company-level agreement, but control by the works council	No company-level agreement	No company-level agreement, but control by the works council. Application of the IGBCE additional wages
	Subcontract- ors	No extension of regulation	No extension of regulation	No extension of regulation	No extension of regulation	No extension of regulation

4.3.2. Chempark Krefeld-Uerdingen

The chemical park in Krefeld was the second-largest production site of Bayer and up until 1998 a unitary production site. The current multi-employer structure originates from the reorganisation of the Bayer company. The first outsourcing of a big segment of the company took place in 1998, when Bayer AG outsourced its dioxide division with 600 employees to an American company (Interview 12). That was the business segment that today constitutes Sachtleben. In the year 2000, Bayer outsourced the catering and logistic services in two autonomous subsidiaries (Bayer Gastronomie and Chemion respectively). In 2002, Bayer undertook a complete restructuring of its internal structure. The company was reconfigured as a "Strategic Management Holding", and was divided in four production (Bayer Healthcare, Bayer Material Science, Bayer Crop Science, Bayer Ground Chemicals) and three service (Bayer Business Services, Bayer Technology Services, and Bayer Industrial Services) companies. Bayer Industrial Services took up the role of site operator, managing the common infrastructural space and providing other companies with auxiliary services. In 2005, Bayer sold its Ground Chemicals unit and 40% of the shares of the site operating company, Bayer Industrial Services, to Lanxess. Hence, as we will better see in subsequent paragraphs, today the site operator is owned by the two biggest production companies settled in the park. Due to further processes of acquisitions and subcontracting, the site counts today 22 different companies which employ around 7,500 workers (Chempark 2013). The most important production companies are Lanxess (1,500 employees), Bayer Material Science (1,000 employees) and Sachtleben (500 employees). Service providers are Currenta, Chemion, Aliseca (240 employees), Bayer Business Services (10 employees) and Bayer Technology Services.

Among these companies, external service providers entering the park though subcontracted agreements with settled companies are not considered. On these service providers, the number of employees they employ for providing required services and how they pay their employees, works councils have no information (Interview 10, Interview 12).

Table 6. Overview Chempark Krefeld-Uerdingen

Chempark Krefeld- Uerdingen	Company	Area of activity	Number of employees	Collective agreement
Main production facilities	BMS	Materials	1000	Chemical
	Lanxess	Pigments	1500	Chemical
	Sachtleben	Ground chemicals	500	Chemical (with opening clause)
Main service facilities	Currenta	Site operator	610	Plant-level collective agreement (IGBCE)
	Tectrion	Maintenance	220	Plant-level collective agreement (IGBCE)
	Chemion	Logistics	1000	Plant-level collective agreement (IGBCE)
	Aliseca	Maintenance	240	Chemical
	Bayer Gastronomie	Catering	N/A	Not chemical (possibly catering)
	BBS	IT	10	Chemical (with opening clause)
	BTS	Engineering	N/A	Chemical (with opening clause)
	Weber Rohrleitungsbau	Maintenance	N/A	Metal
	Horst Goetz Industriereinigung	Industrial cleaning	N/A	Not chemical
	Lehnkering	Logistics	N/A	Not chemical
Total	22		7500	

The role of workers representatives

Similarly to what happened at Hoechst, workers' representatives did not enter restructuring decisions (Interview 10, 12). The sole exception to this rule was the case of Bayer Industrial Services (BIS, today Currenta), where a fierce counterposition took place over the subcontracting of some segments of the company after it was already outsourced by Bayer. At BIS, the works council aimed at blocking outsourcing and to find a "solution under the same root" (see the paragraph on Currenta for further details). According to an interviewee, this was due to the perceived commitment of the works council towards workers who were employed since a long time by Bayer.

So, this was the biggest problem: through the transfer you would have moved those

people into other collective bargaining realms. Some would have become ver.di, some other IG Metall, still other would have had no collective bargaining coverage. In principle, you would have left those people to their own destiny (...). And this is simply...we did not want that, because they have been part of this company for a long time (Interview 10).

In general, instead, works councils have dealt with the social consequences of restructuring, leaving restructuring decisions to the management. They have operated through the definition of transition agreements (*Ueberleitungsvereinbarungen*), which aimed at ensuring existing individual working conditions for transferred employees.

The second major goal of employees' representatives was to keep all companies settled in the park under the representation realm of the chemical union. Again, the most problematic aspect was represented by those company or company segments carrying out service activities. As at Hoechst, indeed, the presence of new market relationship between chemical companies and service providers produced a pressure on prices for the new service companies. Due to the high incidence of personnel costs within service companies, this pressure translated into cost-cutting pressures on wages. Actually, as we will see below, this was exactly the aim of the management in defining outsourcing processes (Interview 11). Again as in Hoechst, cost-cutting pressures were dealt with through the reliance on flexibilisation measures present in the chemical collective agreement (i.e. opening clauses and company-level collective agreements). This kind of concessions have been used both in the first restructuring phase (i.e. during the reorganisation of Bayer) and in subsequent outsourcing waves concerning the single companies and most of all service providers. They have enabled the works councils and the union to keep almost all companies within the chemical bargaining realm even if, as we will see further on, at the expense of wage segmentation across different companies or company segments.

Still, in some cases these flexibilisation instruments were not sufficient, since wage differentials between the chemical collective agreements and those applied in other branches were too big. This was, for example, the case of Bayer Gastronomie (a subsidiary of Bayer providing catering services and growth out of the externalisation of Bayer's catering division), where, according to the chair of the works council.

we have tried to negotiate a plant-level agreement for Bayer Gastronomie, because due to the kind of activities the responsible trade union would be the catering union NGG and they have for these activities significantly lower rates than we as IG BCE have. And there the deviations were very very big, they were even 40-50% under the collective agreement of the chemical industry. And therefore an opening clause would have not been sufficient. So the IG BCE tried to bargain a plant-level collective agreement with Bayer Gastronomie, with distinct pay rates, below those of the chemical industry, but significantly above those of the NGG: But we did not manage to do that. We have bargained the transition, according to which transferred workers maintained a wage security for seven years, but a new collective agreement came about (Interview 12).

According to the interviewed works councillors, retaining the collective bargaining unity inside the park was possible because of the presence of flexibilisation instruments in the chemical collective agreement.

Interviewer: I would like to know which is your opinion with regard to the factors that have enabled you to maintain a relatively homogeneous situation within the park, with almost all the companies applying collective agreements of the chemical union.

Respondent: This has been possible thanks to intensive contacts with the IG BCE and to the reliance on opening clauses. Had we not had these instruments within our collective agreement, this would have not been possible (Interview 12).

Also for the management, the union's willingness to compromise and to accept to derogate the sectoral collective agreement was an important point for accepting not to pursue more extreme vertical disintegration agenda.

Interviewer: I was wondering why the management accepted this solution and did not pursue higher cost-advantages through further outsourcing.

Respondent. They have understood, that we works councils and also the IG BCE are ready to find creative solutions for the companies under the heading of opening clauses. So that at the end we could say "with this solution we have been able to reach prices that are similar to those that exist at competitors". And through this argument we have been able to persuade also the management (Interview 10).

The IG BCE is a partner for good solutions, because they have been willing to accept suitable corrections in their collective bargaining politics, which also employees benefit from, since through these instruments they could secure their jobs (Interview Waldi).

Beside the union's willingness to accommodate employers requests through flexibilisation instruments, however, also employers' fear of conflicts possibly originating from the entrance of other unions in the chemical park was deemed important in order to explain why the union maintains a monopoly representation within the park.

I think that employers also have worries that, if they outsource or sell certain activities which are, let's say, important for a chemical park, there could other unions suddenly play a role. So everything has remained under the chemical collective

agreement and the IG BCE. Try to imagine, they now sell the maintenance department and it goes to another company, which falls under the responsibility of the IG Metall, and they have the collective bargaining round. They might strike and during the strike they stop doing maintenance for the machinery in the park. I think the risk is too big (Interview 10).

Representation structures and site cooperation

Representation structures in Krefeld-Uerdingen are slightly less dispersed than in the industrial park Hoechst. Indeed, differently than what happened in Hoechst, the Bayer works council bargained a collective agreement according to paragraph 3 of the Works Constitution Act for the construction of a unitary representation structure for the companies grown out of the reorganisation of Bayer and belonging to the Bayer Holding.

We have bargained a collective agreement with the IG BCE and Bayer for constructing a personnel group (*Personalbund*). Juridically, these were four autonomous companies, but we have acted as if they were still one company (Interview 12).

Still today, the companies belonging to the Bayer Holding (with the exception of Bayer Gastronomie and of the Currenta group, which is owned by Bayer solely for 60%) are represented by the same works council. Similarly, the Lanxess works council bargained the extension of its representation mandate to the subsidiary Aliseca. However, the less fragmented nature of representation structures did not prevent the development of differentiated working conditions also within the representation realm of a single works council. Indeed, works councils negotiated derogations and different employment conditions for specific segments of the workforce or for different subsidiaries in the group (see below for examples).

In terms of intra-firm cooperation, the works councils of the park have built a works councils forum which has the duty to coordinate works councils' activities and discuss common issues (Interview 12, Interview 10).

Through the IG BCE, we have established a "chemical park works councils' conference", where we all convene, all works councils of the chemical park. Because we use the same infrastructure, the same building for social activities, the same canteens. i.e. there are several area of codetermination or several areas of haelth and safety at work that because of codetermination concern us all. And therefore we have to coordinate, even though we are all autonomous bodies, we have to coordinate with regard to how we deal with certain issues and ensure that we get the same information on certain issues (Interview 12).

According to the interviewed works councils, this coordination structure meets every three months and works quite well, ensuring the exchange of information

among the works councillors. Still, it does not constitute an instrument to deal with the effects of marketisation processes over working conditions.

In the next paragraphs, I will present the extent of vertical disintegration within the single firms and how employees' representatives have dealt with the issue.

Bayer Material Science

Bayer Material Science (BMS) is a company belonging to the Bayer Holding. Worldwide, the company employs 14,500 employees and in 2012 its total revenues amounted to 11,6 billion Euros. BMS is a global corporation with around 300 production sites. As we have seen, BMS is the incumbent of Krefeld Chempark and employs today 1,000 workers. The focus of the Krefeld-Uerdingen site concentrates mostly on production. A research centre used to be active in the site, but it was closed in 2009, and the employees were transferred to Leverkusen (after a 30% reduction in occupational levels).

Over time, the Bayer group has established several subsidiaries. As we have seen, Bayer Gastronomie is specialised in catering activities and employs 700 workers. The company runs canteens and internal restaurants in the three production sites and in Leverkusen also a hotel. Moreover, the company has enlarged the business towards the outside and provides catering for private events in the Rhine area. Bayer Technology Services is the subsidiary for engineering services and technological solutions and employs 2,300 workers worldwide and had sales of approximately EUR 450 million in 2012 (BTS 2013). Bayer Business Services manages the IT and HR services (this latter through a further subsidiary) for the whole group. It has 4,300 employees worldwide and had sales of around €1,093 million in 2012 (BBS 2013).

Pay setting system

BMS is member of the employer association of the chemical sector and its employees are paid according to the sector's collective agreement. The largest part of BMS employees are employed between the levels E6 (skilled workers,

Facharbeiter) and E8 and have a vocational training in the relevant occupation (chemical or mechanical occupations). There are some older employees which are employed at the E5 level, since they were trained in non-chemical occupations and were trained on the job when they were hired by Bayer (Interview 12).

As for Bayer Crop Science, BMS has several over tariff payments, which range from an additional pension scheme to a nursery. BMS' employees are also entitled to a bonus system which amounts between one and three additional monthly wages (Interview 12). This roughly represents a positive wage drift of at least 8-10%.

Different working conditions have been bargained for the subsidiaries, mostly through the use of opening clauses. An increase in working time has been bargained for employees at Bayer Technology Services, which work 40 hours a week (instead of the 37,5 fixed at sectoral level) without a corresponding increase of the compensation. Bayer Business Services does not have the same wage structure as in the chemical collective agreement. Indeed, instead of 13 pay groups (*Entgeltgruppen*), workers are grouped in 5 X-levels (*Baender*). According to the chair of the works council, this allows the company "a larger flexibility to group new employees" (Interview 12). Moreover, due to lower wages among competitors (according to an interviewee, competitors pay even 20-30% less) the works council agreed for a cut in wages of 10%.

Due to the competitive situation, we have bargained...we have looked at it very closely at that time, how was the situation at the other big players in the sector, and they paid even 20-30% below our collective agreement. And so we have bargained, in order to keep our collective agreement, a 10% reduction in pay levels (Interview 12).

This was not achieved directly, but through an increase in working hours (from the 37,5 hours per week settled in the sectoral agreement to 40 hours per week) and the absorption of 3,3% of the wage increase in the following collective bargaining round (*Verrechnung*). This opening clause was bargained because the works council wanted to ensure that the company segment remained under the chemical collective agreement and that the company restrained to carry out other outsourcing. However, after some time Bayer management violated the prerequisite for the bargaining of the opening clause, outsourcing a part of the tasks covered by the opening clause. Thus, the works council did not renew the opening clause on working time and BBS employees went back to 37,5 hours per week (Interview

12).

The company did not respect what we wanted to gain with the opening clause, namely to avoid further outsourcing (...) – the company wanted to outsource other segments, in some cases to India (...) and sell them to other companies – and they did it last year to the company Atos. And in the negotiations we argued that, through the alignment with the conditions of the competitors, our goal was to avoid offshoring and outsourcing and the reduction of jobs. And now you do it anyhow. So our preconditions are no longer met. Therefore, we have denied that part of the contract and our colleagues work now 37,5 hours a week (Interview 12).

Bayer Gastronomie has no collective agreements with the chemical union, but it is not clear whether it applies an NGG collective agreement or none at all. According to the works council of the Bayer AG, when the company was outsourced, the former works council tried to bargain a specific collective agreement for the Bayer Gastronomie. However, the wage differentials between what foreseen in the chemical collective agreement and the collective agreement applied in the catering industry (NGG) are around 40-50%. Thus, the works council was not able to keep it under the chemical representation domain, neither trough an opening clause, nor through a specific plant-level collective agreement (*unternehmensbezogener Verbandstarifvertrag*). Instead, the works council was able to negotiate a transfer agreement, according to which transferred employees kept their working conditions for seven years (longer than what foreseen under the law for the transfer of undertakings, which protects working conditions just for one year) (Interview 12).

Agency work and subcontractors

Agency work is very limited at Bayer Material Science (BMS). At the time of the interview (27.10.2013), the company was employing around 20 agency workers. According to the chair of the works council, this is already a significant number in respect to the average utilisation of agency work at BMS (in past years they had an average of 5-10 agency workers) (Interview 12). They are mostly utilised as substitutes in cases of illness or vacation of permanent workers. According to the chair of the works council, the main explanation for this low level of agency work is the presence of a company-level agreement where the social partners have excluded economic redundancies (*betriebsbedingte Kuendigungen*) and stated the prevalence of internal over external employment. With regard to the issue of agency work, this agreement sets that in order to deploy agency workers the

company has to prove that nobody else among the company's employees can cover that job (Interview 12). Even if external personnel is needed, moreover, the works council tends to prefer (and thus asks the management) the hiring of workers with fixed-term contracts (befristete Beschaeftigte) to agency workers (Interview 12). Lastly, Bayer has a special employee platform, so called Bayjobs, where employees which have finished their vocational training and still do not have a position within the company or employees whose jobs have become redundant are temporary placed and can be assigned to different activities. Through this system, the company also covers those temporary vacancies (like illness or vacation of permanent employees) which would otherwise be covered through agency work. In case the company hires agency workers, the works council controls that agencies belong to the employers association of the agency sector, so that agency workers get the additional wages bargained by IG BCE at sectoral level. However, no equal pay provisions have been bargained for these workers. The permanent hiring of agency workers by BMS is considered as an absolute exception, since the company privileges the creation of an internal labour market and the hiring of young workers which have finished a vocational training within the company (Auszubildende). According to our interviewee, agency work is not a crucial issue for the works council ("the issue agency work is not a key one", Interview 12) and it is handled

Much more critical is the issue of outsourcing and subcontracting, "where people working on our premises are removed from the chemical collective agreement, because they work for other companies, which sometimes do not even have a collective agreement" (Interview 12).

as if it was a completely marginal phenomenon.

According to the chair of the works council, it is difficult to understand how many workers are employed at the site through subcontracting agreements. "We always ask it, but we get no satisfactory answer". According to her, sometimes even BMS's management does not know how many workers are employed by the subcontractors, because they sometimes contract out work themselves. Some years ago, an estimate was attempted relying on an instrument used to assess personnel efficiency (the Shell Personnel Index), which maps the use of external personnel in every function. According to the analysis, the number of external personnel has

grown significantly over the years, in some maintenance segments even by 50 percent. However, the chair of the works council was not able to give concrete numbers on this issue.

As we have seen, some service segments have been outsourced to subsidiaries. Bayer Technology services provides engineering and other technical services. IT-services are provided by Bayer Business Services. Some of these services are not provided in Germany, but have been offshored. For example, the Head Desk for IT services is based in India and the accounting department in Manila (Interview 6). Services related to the common infrastructure of the park are provided by Currenta (see further on for details). Catering services have been transferred into an autonomous subsidiary in 2000 and today they are provided by Bayer Gastronomie. A reorganisation of the logistics process is currently taking place at the BMS production site in Dormagen, with the goal to subcontract further segments of the logistics services. starting from 2016-2017, this will take place in Krefeld-Uerdingen as well according to the program "Site logistics NRW".

In the past, the issue of outsourcing had been regulated by a plant-level agreement bargained by the works council (*Betriebsvereinbarung*), but according to the chair of the works council this agreement is no longer applied in the praxis (Interview 12). The works council would like to bargain another agreement on external employment (*Fremdbeschaeftigung*), covering both agency work and subcontracting. However, even if the management is willing to discuss the issue of agency work, it is not available to jointly regulate subcontracting, arguing it is a free company decision. An agreement has been bargained in 2013 for dealing with the restructuring process and outsourcing of the logistics services (Interview 12). The agreement obliges the company not to subcontract work to firms which do not apply a collective agreement. Thus, we can see a concern from the works council on the issue.

Lanxess³⁸

Lanxess is a company specialised in the development, manufacturing and marketing of plastics, rubber, intermediates and speciality chemicals. The company grew out of the outsourcing of the Bayer Group's chemical and plastics businesses at the beginning of 2005. In 2012, the company generated 9.1 billion Euros revenues and employed roughly 17,500 employees worldwide (Lanxess 2013a). The company is currently represented at 52 production sites worldwide. Krefeld is the second largest production facility operated by the company and is the headquarter of the Inorganic Pigments Business Unit (Lanxess 2013b). In Krefeld, the company employs 1,500 workers (Der Betriebsrat 2013: 10). Since the time of its establishment, Lanxess has built a subsidiary for technical and maintenance services, Aliseca. In Krefeld, Aliseca employs 240 workers.

Pay setting system

Lanxess is member of the employers' association of the chemical industry and its employees are paid according to the chemical sectoral agreement. Employees at Aliseca are paid according to the chemical collective agreement and to the company agreement of the mother company. Furthermore, Lanxess employees receive a yearly bonus which is dependent both on the company and the individual performance. The first element ranges between 2,5% and 7,5% of a yearly wage, the latter between 250€ and 1,5 monthly wage (Lanxess 2013b). This additional yearly bonus does not apply to Aliseca. Lanxess works council also represents Aliseca's employees.

Agency work and subcontractors

Agency work is quite widespread at Lanxess. At the end of 2012, the Lanxess group employed 673 agency workers (slightly less than 10% of the total workforce, see Der Betriebsrat 2013: 10). In 2012, Lanxess in Krefeld employed 66 agency workers and Aliseca 4. According to the works council of the Leverkusen site, two

The paragraph on Lanxess is not based on interviews with plant level informants, but with interviews of other works councillors and information retrieved on the internet.

different deployment modes can be highlighted at Lanxess and its subsidiary Aliseca. While at Lanxess agency work is mainly used as a coverage for production peaks, at Aliseca is a structural component of the daily operations, used to substitute core workplaces and as an instrument for the reduction of wage costs (Der Betriebsrat 2013: 11). According to what reported in a newspaper published by the company's works council in Leverkusen,

While Lanxess and Saltigo [another company belonging to the group] make use of agency work mostly in order to cover production peaks and temporary vacancies, Aliseca follows another reasoning. In this case, agency work is used for the handling of daily activities or for standstills. In this case, agency work substitutes stable job positions and is used as an instrument for reducing personnel costs (Der Betriebsrat 2013: 11).

The fact that agency work is potentially substituting stable job positions had the consequence that the issue is acquiring importance for the works council. Indeed, the general works council is trying to bargain a new plant-level agreement on the issue. The platform entails the use of agency workers just for production peaks, the oblige to hire agency workers just from agencies applying the DGB collective agreement, and the inclusion of agency workers in training measures (Der Betriebsrat 2013: 11). The logics of the agreement is, thus, to restrict the use of agency work and to ensure minimum standards for those employed.

With regard to outsourcing and subcontracting, technical services are outsourced to Aliseca. Logistics services are outsourced as well. Since 2009, a part of these services have been outsourced to Lehnkering. No plant-level agreements, however, are in place with regard to the issue.

Currenta

Currenta is the site operator of the former Bayer's production site in Krefeld-Uerdingen. It was externalised as Bayer Industrial Services in 2002, when the Bayer AG was restructured as a strategic holding (see above). 2005, it was renamed as Currenta. In the same year 40% of the company was sold to the by then autonomous Lanxess, so that today the company is owned 60% by Bayer and 40% by Lanxess.

Currenta employs 3,300 workers in the three production sites of Leverkusen,

Dormagen and Krefeld-Uerdingen. Currenta has six business segments: energy, environment, security, CHEMPARK, analytic and education. As for InfraServ Hoechst, the services provided by Currenta can be divided between voluntary and monopoly services. According to a manager, monopoly services represent less than 10% of the overall sales volume (Interview Waldi). Competition with external providers represents for Currenta a major challenge, especially in voluntary services. This triggered several reorganisation measures aiming at increasing the company's competitiveness and adapting service prices to the market.

We are exposed to a very normal competition for getting contracts. This means that if we want to sell our services, also to our shareholders, we have to offer these services in competition with other providers. We do not have particular rights, so that for example our shareholders prefer our services. They get the offers also from other providers and our prices have to conform with them. Otherwise we will not get the contracts (Interview 10).

Indeed, Currenta has two subsidiaries, Chemion (logistic services) and Tectrion (maintenance) which employ respectively 800 and 1100 employees and were founded in order to reduce the costs of service provision (Interview Waldi). Chemion was founded in the year 2000 (not by Currenta, but by Bayer itself) as the second autonomous company at the Krefeld-Uerdingen site together with Bayer Gastronomie. The company is active in Leverkusen, Dormagen, Krefeld and Duisburg and employs around 1,000 workers in the four sites. Chemion provides transport solutions, on-site and distribution logistics, storage and batching of chemical products, operates a container terminal and the Krefeld-Uerdingen port (Chemion 2013).

Tectrion was born in 2008 from the outsourcing of the Technical Services Business Unit from the former Bayer Industry Services. Today, the company employs 1,200 workers in the three sites (Tectrion 2013). The works council was strongly against the outsourcing of Tectrion, but had to accept it to avoide it was sold. However, in exchange to its consent to the outsourcing, the works council required that Tectrion remained under the representation domain of the Currenta works council.

In 2006, a fierce dispute arose between the works council and the management, because the management started plans to outsource the business segments security, analytics, facility management and maintenance (Interview 10).

The service department was operating at a massive deficit, i.e. we were making massive

losses. And therefore in 2006, after we elected a new works council, so we were more or less out of the Bayer system (*Personalverbund*), the have developed a so called "strategic project". And in this strategic project the management tested which areas (...) of the company should belong to the service portfolio, to the core competences of a service provider within a chemical park. And the deliberation of the management was that around a third of all BIS employees – at stake were the areas plant security, chemical analysis, facility management and maintenance – they should have been sold to competitors, to other external providers specialised on these issues (Interview 10).

A manager very clearly explains that these measures were undertaken in order to gain competitiveness by redefining pay levels.

Respondent: Thereby the goal was to strengthen the competitiveness of these areas, because no job can be kept, which is not competitive".

Interviewer: And how was this to be achieved?

Respondent: Though a more adequate and more competitive pay structure (Interview Waldi).

However, as we have argued above, the works council did not accept the outsourcing decision because this would have implied worse working conditions for transferred employees.

We had long discussions with the employer, but could find no solution, because they always told us that, in comparison to external providers...I go on with the example maintenance. There are pure maintenance companies in Germany and they can offer their services at much lower prices than ours. Therefore, they would have liked to sell our maintenance. A consequence of this would have been that our people, if they were sold, would have got much lower wages and another working time. So worse employment conditions (interview 10).

The dispute was resolved through the definition of a specific plant-level collective agreement which derogates the sectoral collective agreement with respect to working time and wages. This agreement also entailed a solidaristic contribution of all workers in the company in order to keep less competitive segments in-house. Indeed, workers employed in relatively competitive activity segments accepted a lengthening of their working time (see below for details) in order to allow weaker segments to remain within the company and ensure that employer accepted the presence of some segments that were operating at a loss (Interview 10). Still, other derogations have been required for the latter segments, thus producing a segmentation in working conditions within the company. However, even though this instrument has enabled workers to remain within the representation realm of the chemical union, it is still questionable whether it offers a stable solution to the outsourcing problem, because the management continuously comes with requests

for new concessions. According to the chair of the works council,

This plant-level collective agreement was necessary in order to stabilise the situation of the company and to save jobs. But at the end we have a continuous pressure on the prices of our services, because also our shareholders, Bayer and Lanxess, compare our services with those of external competitors. And if at a competitor an hour of work costs \in 30 and we cost \in 40, then it is clear how big is the pressure. We know this since the very first day until today (Interview 10).

In order to partially compensate the pressure, the works council and the union have steadily argued on the difference between service personnel within a chemical park and other security. Below is a typical argument taken from the information newspaper published by Currenta's works council:

the fact that the security industry can enter the market with very low personnel cost is a reality. However, equally clear is for the IG BCE that the plant security in a high-risk industry with high safety standards cannot be compared with the guards of a supermarket (Betriebsrat Leverkusen 2013).

However, in how far this argument is going to be effective is an open question.

Pay setting system

Currenta is part of the chemical employers' association, but, as I have stressed, it does not apply the sectoral collective agreement, but a specific plant-level agreement negotiated between the company and the local IG BCE branch. However, pay levels for the majority of Currenta's employees are defined according to the sectoral collective agreement. Some workforce segments, instead, such as security and facility-management are paid according to lower rates (Interview 10). Indeed, the plant-level agreement introduced a market-factor (*Marktfaktor*) aiming at adjusting wage levels to external competitors. Accordingly "the market-factor is tied to competitiveness, which is proved by the employer in comparison with competing collective agreements of other DGB trade unions" (Betriebsrat Leverkusen 2013: 28). Wage differentials for those groups of workers lie between 10 and 20% below the chemical collective agreement (BIS 2007). Still the level of their salaries lie quite above the levels set in the collective agreement of the security sector.

As in other cases, these reductions in wage levels were not reached through direct pay cuts, but through the absorption of subsequent wage increases coming from yearly collective bargaining rounds in the chemical industry (Interview 10).

In 2007, the management and the local branch of the union have negotiated an opening clause on working time. Accordingly, working time for employees at Currenta was increased to 40 hours per week instead of 37,5 as set in the chemical collective agreement. This was meant to reduce wage levels by 10% in respect to the sectoral agreement. However, in the 2013 bargaining round the union was able to set a way for progressively reducing working time to 37,5 hours by 2015 (Betriebsrat Leverkusen 2013: 13). However, this working time reduction applies solely to half of the company's workforce and excludes those workforce segments whose pay levels are below the one set in the chemical collective agreement (namely maintenance, security, analytics). For some of those groups (such as employees at Tectrion), the bargaining round achieved a working time reduction to 39 hours per week, while for others (such as ISS and security) it will remain at 40 hours per week (Betriebsrat Leverkusen 2013: 13). This raised some dissatisfaction among several groups of employees (Betriebsrat Leverkusen 2013: 27ff.).

A different pay setting system is applied to Currenta subsidiaries. Chemion's employees are paid according to a plant-level collective agreement (*unternehmensbezogener Verbandstarifvertrag*). The company is still part of the employers' association and is represented by an autonomous works council.

Agency work and subcontracting

Currenta has a very low amount of agency workers (4-5 in the medical services). Tectrion, instead, has around 100 agency workers (Interview 11). Agency workers enable the company to overcome oscillations in the business model and production peaks (especially during production stoppages, which usually take place from April to October) (Interview 11). Agency worker are highly qualified and strongly integrated into the standard workforce. At time of the interview, no collective agreement on the issue has been stipulated, even though a works councillor argued that the increased numerical significance of agency work within Tectrion has made the issue more relevant. Indeed, the works council would like to negotiate on the issue (Interview 10).

Currenta has subcontracting agreements with external companies in the area industrial gases and security. With regard to the latter, all the security business will

be progressively subcontracted in that retired personnel will not be substituted (Interview 11). Even though outsourcing has always played a significant role at Currenta (also as an instrument to force concessions over the workforce), the chair of the works council considers the current situation as being relatively stable and no further outsourcing waves seem likely. On the one hand, this depends from the high qualification levels and thus quality of services given by Currenta. As we have already seen, on the other hand, the chair of the works council highlights employers' fear of conflicts as a reason for no further outsourcing. However, he also argued that

the issue of process optimisation, cost-cutting, etc. is always there, it is always an issue on part of the employers. So that I would not be sure that at some point they get the idea of outsourcing something else (Interview 10).

Table 7. Wage segmentation and works councils' strategies at Chempark Krefeld-Uerdingen

		BMS	Lanxess	Currenta	
Position in the value chain Employees		Final producer	Final producer	Site operator	
		1000	1500	Around 1000	
Pay set- ting	Regular work- ers	Sectoral agreement + bonuses (8-10% yearly wage)	Sectoral agreement + bonuses (2,5%-7,5%)	7,5%) Plant-level collective agreement. Security, facility management and analytic: opening clause on working time (40h) and wage corridors (15-25% below)	
	Subsidiaries	BBS and BTS: same sectoral agreement but opening clause Bayer Gastronomie: not chemical	Aliseca: same sectoral agreements (no bonuses)	Chemion and Tectrion: Plant-level collective agreement with opening clause on working time (40h) and wage corridor (10% below)	
	Agency work- ers	DGB collective agreements + IGBCE additional wages	DGB collective agreements + IGBCE additional wages	DGB collective agreements + IGBCE additional wages	
	Subcontractors	Other collective agreements (not specified)	Other collective agreements (not specified)	Other collective agreements (not specified)	
External flexibility	Agency work	Very limited (20)	Moderate (66, 4,5% of the workforce).	Very limited at Currenta, intensive at Tectrion	
	Subcontractors	Support services on-site (outbound logistics, maintenance, IT, payroll). In the future probably also on-site logistics	Support services on-site (logistics, maintenance)	Support services on-site (security)	
WCs' position	Agency work	Restrictive –fixed-term contracts instead	Acceptance for production peaks but not as a stable element (trying to bargain an agreement)	Acceptance	
	Subcontractors	Restrictive (needs to be regulated, currently trying to bargain a plant-level agreement)	N/A	Opposition in 2006 and 2008, now acceptance for security	

Regulation	Agency work	No company-level agreement, but control by the works council. Prevalence of internal employment. Application of the IGBCE additional bonuses	No company-level agreement, but interest in negotiations from the works council as a response to substitution (at Aliseca).	No company-level agreement, but interest in negotiations from the works council.
	Subcontractors	Regulation in logistics (for internal and external employees).	No extension of regulation	No extension of regulation

Summary

Table 7 above summarises working conditions and works councils strategies within the single companies. As we can see, as happened also at Hoechst, the fragmentation of the formerly organisationally integrated production into a multiemployer site has produced a segmentation of working conditions between and within the companies. This has most of all gone to last of service companies' employees. Thus, even if almost all companies fall under the representation domain of the chemical union, significant wage differences are visible between production and service companies. Indeed, production companies still pay above the chemical collective agreement, while service providers fall below this level. Still, according to the interviewed works councillors, almost all companies apply a collective agreement signed by the chemical union IGBCE (Interview 12, Interview 10). The sole exception is Bayer Gastronomie, which applies a collective agreement negotiated with the catering union NGG. However, several companies (Currenta, Tectrion and Chemion) have stepped out from the sectoral collective agreement and apply a specific plant-level one. As in Hoechst, external subcontractors are not counted by the works councillors and usually do apply collective agreements of other branches or no collective agreements at all.

In term of works councils strategies, the main goal had been to keep the representation domain of the union and the application of the chemical collective agreement. With regard to agency work and subcontracting, it generally gets an issue when their number increase and they become a problem for internal employees.

4.4. Conclusions

As we have seen from the analysed case studies, vertical disintegration has produced major challenges for employees' representatives during the restructuring process of big chemical companies which brought to the creation of chemical parks. More limited has been, instead, the incidence of agency work and other

forms of subcontracting since then on.

In terms of the responses developed by workers' representatives to these developments we have identified relatively similar orientations in the two cases. Trade union's and works councils' strategies have been characterised by the absence of opposition to restructuring, the (generally successful) attempt to keep all new companies (service providers and producing companies alike) under the chemical collective agreement, and scarce attention for newly settled service providers, agency workers and subcontractors not emerging from the dissolution of the two incumbents, Bayer and Hoechst.

In both our case studies, employees representatives have not questioned outsourcing and the reorganisation of the two companies. This was explained with reference to the lack of codetermination rights on such issues, which, according to the Works Constitution Act, constitute economic decisions of the firm (Interview 1 and 2). Still, these reorganisation processes were associated with remarkably low levels of conflict (Kaedtler 2006: 112ff.). Thus, the lack of legal rights is probably not the only explanation for the behaviour of workers' representatives, but this may also be referred to the fact that they partially accepted the managerial perspective on restructuring and shared the idea that this was necessary for the competitiveness of chemical firms. In one case, during the creation of InfraServ Hoechst's logistics subsidiary, the works council's acceptance of outsourcing aimed at protecting the core workforce and confining restructuring costs on logistics employees. This episode very closely resembles the hypothesis formulated by the dualisation literature with regard to the behaviour of trade unions and works councils when faced with employers' segmentalist strategies. However, two elements suggests we can hardly subsume all other cases under this logic, confirming the idea that employees' representatives in core sectors have sustained managerial restructuring for protecting their members' interests. First, examples in which the trade off was so visible are rather limited. The cited case is the only one in which the avoidance of negative costs for the core workforce was explicitly traded off against a worsening of working conditions for a part of the workforce (i.e. in which the choice would have been between a general reduction in employment conditions or their reduction solely for a single part). In all other cases, employees

representatives underwent these processes in a rather passive way. In one case, instead, a works council fought against the contracting out of non-core activities for ensuring that all workers remained within the company, even requiring a "solidarity contribution" on part of the rest of the workforce.

Secondly, transferred workers never exited the bargaining domain of the chemical union. Indeed, the major goal of employees' representative during this phase was to maintain a unitary representation structure within the parks and to ensure that all new companies fell within the realm of the chemical collective agreement. This, even by accepting the segmentation of working conditions between production and service companies. For transferred employees this choice meant avoiding a much stronger deterioration of their employment conditions, which would have happened if they were moved from the chemical collective agreement (which, as we have seen, envisage very high standards) to collective agreements of other branches.

Thus, it seems to me that, more than reflecting a subordinated position of these workforce segments within the union's constituency or an attempt on behalf of works councils in chemical companies to discharge the negative effects of restructuring onto peripheral employees³⁹, this strategy reflects the accomodationist tradition of the chemical unions. Indeed, the acceptance of segmentation was the result of a compromise aiming at avoiding that peripheral workers had to undergo worse working conditions on the external labour market. This seems confirmed also by the fact that, even in the sole case in which employees' representatives fought against outsourcing, mobilising conflict against the employer's decision, the solution of the dispute entailed the construction of differentiated terms of employment for different segments within the company's workforce. This seems to reflect the traditional "economism" of the IG BCE culture, which, in this case, has assumed a part of the managerial point of view (the presence of work of different value within chemical companies, which has to be remunerated according to different principles), but is still committed to protecting the whole workforce.

As we have seen, this strategy was possible because of the presence of a corresponding point of view on part of the employers. Indeed, managers within the chemical industry support the presence of the chemical union as the sole

³⁹ I use peripheral for indicating workers employed for non-core, non-production activities, i.e. those employed for services.

representative of workers in the park and are willing to pay a price (i.e. avoiding the most extreme outsourcing measures) in order to safeguard it. Thus, employees representatives faced a counterpart which was disposed to find a compromise without having to exercise stronger conflict.

However, the commitment of the IG BCE and of the works councils of chemical companies towards those peripheral workforce segments also makes more evident a specular exclusive attitude towards other groups of peripheral employees, thus revealing an exclusive understanding of their imagined constituency. Indeed, employees' representative do not display the same attitude towards other "external" workers, such as agency workers and those subcontractors that did not grow out of the restructuring process of chemical companies (such as new logistics or maintenance subcontractors). The latter have remained outside the focus of employees' representatives and are not regulated at plant level. Thus, this differentiated strategies suggest another element important for understanding the inclusive (even if segmentalist) strategy of the employees' representatives, i.e. the fact that these restructuring processes entailed the transfer of workers form chemical to service companies. Thus, workers in the newly grounded service companies were not "outsiders" but shared a chemical identity and were recognised as chemical workers. Furthermore, they constituted the traditional backbone of the IG BCE membership (Kaedtler 2006: 90). As a trade unionist argued, these areas constitute "the classical activities, where we have a high unionisation rate, classical technical and craft occupations"40 (Interview 13). The presence of a common sectoral identity and of organisational incentives are, thus, key in understanding the behaviour of employees' representatives.

On the contrary, other forms of vertical disintegration receive attention only when they become a problem for the union's core constituency and especially for chemical workers. In this light we can explain both the sectoral regulation of agency work, the lack of a comprehensive strategy of regulation of this issue at plant level regulation, and the scattered cases in which this is acquiring relevance.

⁴⁰ According to the interviewee, the high organisation rate of these workers was an important element for understanding the success of the union in maintaining a unitary representation structure. Indeed, according to a national trade unionist, "this [a high organisation rate within technical areas] has given us a certain power in shaping the outcomes and therefore we have been able to influence the process".

Indeed, at sectoral level, agency work has been regulated because it was perceived as constituting a threat for core workers due to its increased numerical relevance. On the contrary, in our cases, agency work constitutes a marginal phenomena, which requires no regulation or is admitted in exchange for other concessions (such as in the case of Clariant). Only in those cases (such as Bayer's pharmaceutical divisions) where agency work is getting more significant, the works council is raising the issue of regulation. In all these cases, the central concern of employees' representatives is not primarily on the well-being of agency workers, but on the potential threat they pose to core workers. Similar is the case of subcontracting. Just in one of the researched companies (namely Bayer Material Science) the works council pressed for a regulation of the issue and solely for a peculiar segment (logistics). In all other cases, no regulation had been bargained. However, in some cases, the issue is getting more relevant, because it is entering more crucial areas of the companies.

Chapter five

The automotive industry

The automotive industry constitutes one of the driving sectors of the German economy. In 2012, the industry employed almost 750,000 workers directly (VDA 2013a) and estimates set at around 1.7 -1.8 million the number of jobs related to that industry (Legler et al. 2009: 65). In the same year, almost 5,400,000 cars were produced in Germany and the industry accounted for a business turnover of €357 billions (VDA 2013b: 14). In Germany, the automotive industry plays a much more crucial role than in other countries (Legler et al. 2009: 10ff.). Indeed, in 2006 it made up more than 4% of all German value added and around 14% of the value added of the manufacturing industry⁴¹ (Legler et al. 2009: 10ff.).

The German car industry is dominated by seven main final producers (so called Original Equipment Manufacturers, OEMs): Audi, BMW, Daimler, Ford, Opel, Porsche, and Volkswagen. In 2002 there were 40 first-tier suppliers, 250 second-tier and 1,400 third-tier suppliers (Barthel et al. 2010: 18).

Historically, the German automotive industry has been described as the prototypical example of the German model of Diversified Quality Production (DQP) (Streeck 1991). This model, which afterwords became the basis for the categorisation of Coordinated Market Economies according to the Varieties of Capitalism approach, envisages a production strategy based on diversification and non-price competition which rests on the use of sofisticated technologies operated by highly skilled workers. This strategy rests on a thick set of institutions which, on the one hand, ensures workers' commitment and investment in specific skills and, on the other, produces high wages, low wage spread and workers' participation

⁴¹ The mean of the OECD countries is respectively 2% and 8% (Legler et al. 2009: 12).

(Streeck 1991: 35). However, according to several observers, this model has started to change since the 1990s. One of the most significant drivers of this change has been vertical disintegration (Juergens 2004, Doellgast and Greer 2007, Greer 2008). Thus, it is of particular importance to look at how the union dealt with these processes.

Furthermore, the automotive industry constitutes a stronghold of the metalworkers' union, IG Metall. The unionisation rate of the industry lies at around 70% with peaks of over 90% in almost all OEMs (Bispinck and Dribbusch 2011: 18). All automotive OEMs and most of the biggest suppliers have powerful works councils, which are usually hegemonised by IG Metall candidates⁴² (Dribbusch 2012: 125). Also for this reason, the automotive industry has often been a pace-setter in terms of collective bargaining and in the definition of the union's agenda. Thus, exploring what happens within this branch is of crucial importance for understanding the general orientation of the union.

5.1. Vertical disintegration in the automotive industry

Vertical disintegration has not been a new phenomenon in the automotive industry. Already in the 1970s, the industry outsourced several segments of its production process to external companies. However, a major push in this process took place during the 1990s, when all Western OEMs, largely inspired by the Japanese model and the debate on lean production (Womack et al. 1990), started to push for a concentration on core competences and the externalisation of non-core activities. The reorganisation of the value chain had two, strongly connected, main characteristics: a reduction in vertical integration levels and a changing relationships between OEMs and suppliers. This process was enabled by the development of a new car architecture based on the principles of modularisation and the introduction of the so called platform strategy. This strategy aimed at

The situation with regard to industrial relations institutions, however, is much different in the supplier industry. Here, bigger suppliers have unionisation rates and working conditions similar to those at OEMs, while smaller suppliers have a much weaker union presence (Bispinck and Dribbusch 2011: 13).

"combining economies of scale and scope" (Haipeter and Banyuls 2007) and to reconcile the advantages of mass production and the need to offer diversified products as required by consumer demands. Indeed, it defines a new car architecture based on the division of the car into different standardised modules, common to several car models, which can be differently assembled and combined in order to produce different final results (Juergens 2011). This new structure allows "production of large sections of the car, such as the cockpit or the front-end, to be assembled by selected suppliers and delivered as an integral part to the assembly plants of the car-makers" (Juergens 2004: 419). Thus, it contemporary facilitated the outsourcing process and the flexibility of production among different locations. Furthermore, it requires that suppliers undertake new roles and responsibilities, getting involved in the planning and development of car modules. Thereby, this strategy also enables OEMs to shift a part of the investment and development risks to suppliers. However, it has also triggered a process of concentration and consolidation among first-tier suppliers, which have become multinational giants often called mega-suppliers. Indeed, only few companies have the competences and the financial resources necessary for becoming module suppliers (Juergens 2011: 20). According to the consulting company Roland Berger, especially in production-oriented segments (such as brakes, cocks or injection systems) there is generally a very concentrated market structure, whereby "the market leader owns a market share of 30-35%, the top-two companies account for 50% and the top-five for 75% of the market" (Roland Berger 2010: 3). Interestingly, five of the twenty biggest automotive suppliers in the world are German companies⁴³ (Barthel et al. 2010: 17).

This consolidation process was, however, also consequence of an explicit strategical re-orientation by OEMs, which pursued a radical simplification of their supplier's chain in order to reduce transaction costs. For example, the number of Fiat's suppliers reduced from 1,200 in 1983 to 330 in 2000 (Follis and Enrietti 2002: 5). Similarly, the suppliers of the Volkswagen plant in Sachsen was cut in half during the 1990s.

Due to these processes, the structure of the automotive value chain profoundly

⁴³ They are Bosch, Continental, ThyssenKrupp, ZF and BASF (Barthel et al. 2010: 17).

changed, acquiring a more hierarchical character, often described through the pyramid metaphor. At top of the value chain, immediately below the OEMs, are first-tier suppliers, which, as we have seen, have the task of delivering complete modules and, consequently, to organise lower tiers of the value chain. Second and third-tier suppliers, instead, deliver single parts and components to first-tier suppliers. Distinguishing of the pyramid structure is, according to Juergens, the fact that "the tiers clearly differ with regard to firms' size, technological competences, as well as working conditions and pay levels" (Juergens 2011: 21).

Another important development has been a consequence of the introduction of just-in-time and just-in-sequence production systems. Indeed, these production methods require suppliers to adapt production rhythms to the fluctuating demands of the OEMs and to respond within short time frames to their requests. This has triggered the construction of module assembly plants in the close nearness to OEMs' premises. In some cases, this process has taken the shape of industrial or suppliers park⁴⁴ (Pfohl and Garais 2005).

Within these reorganisation processes, a crucial element regards the new role assumed by logistics companies. Indeed, increased vertical disintegration levels on the one hand, and just-in-time imperatives, on the other, have contemporary triggered an increase in the incidence of logistics activities in the overall automotive production costs. Moreover, several logistics providers have progressively moved from providing pure transport services (i.e. moving components or modules from the supplier to the OEM), to organising the suppliers chain (the so-called supply-chain management). Thus, in order to be able to provide their clients with full-packages, logistics providers have progressively moved towards the incorporation broader activities, which range from packaging and storage, to pre-assembly⁴⁵. Indeed, logistics suppliers increasingly undertake activities (and acquire competences) which were typical to manufacturing companies. Similarly to what happened among first-tier suppliers, this tendency

According to the Fraunhofer Institute, "today there is barely a new or restructuring plan of plants in the automotive industry that does not contemplate also a specific supply structure such as a supplier park" (Fraunhofer Institut 2006: 2).

For example, the website of a leading logistics supplier, Schnellecke, reports module and welding assembly as a crucial competence of the company (Schnellecke 2013). Indeed, logistics providers more and more also function as system integrators, assembling individual parts into complete modules.

has triggered a process of specialisation and of concentration. According to a purchaser of logistics services within a German OEM interviewed by Meissner, indeed, worldwide there are around 15 companies able to provide these so called value-added activities (Meissner 2013: 13).

Outsourcing, however, has not involved solely production, but also a broad range of services. Besides logistics, which we already analysed, other services, more or less close to OEMs' core competences were progressively outsourced. These services range from auxiliary activities, such as cleaning or catering, to crucial components of the production process, such as research and development (R&D) activities. As we have seen, growing portions of a car's development process have been passed down to module suppliers. However, both the OEMs and the suppliers have increasingly commissioned development activities to external engineering service companies (Rentmeister 2002). Thus, vertical disintegration has not concerned solely the manufacturing process, but also R&D.

The German car industry followed much of the patterns typical of the automotive industry all over Western countries. The contingent trigger of restructuring was, however, the severe crisis experienced by the industry in the first half of the 1990s. As a consequence, outsourcing and subcontracting have acquired a new relevance and the German OEMs started to undertake major outsourcing waves. According to the German Association of Car Industry (VDA), between 1980 and 2007, the level of vertical integration of the industry has reduced from 35% to slightly above 20% (VDA 2008: 78). This is reflected also by the shift in employment from OEMs to suppliers. According to Meisser, indeed, in 1980 OEMs employed 63% of the industry's workforce, while this share reduced to 51% in 2008 (Meissner 2009: 7). In 2010, German auto-suppliers accounted for 70% of the national value added production in car manufacturing (VDA 2010: 53).

Vertical disintegration took place in several ways: the externalisation of components and parts production to external companies, the creation of autonomous subsidiaries, the use of in-house service providers and the reliance on agency work. Cross-boarder outsourcing has also acquired new importance, with several automotive groups externalising production facilities to other countries and especially to Eastern Europe. The fall of the Iron curtain, indeed, opened up the

possibility for manufacturing companies to locate production facilities in countries with much lower labour costs, but a strong tradition in manufacturing and car production in particular (Meardi 2012).

Moreover, OEMs in Germany have established separate subsidiaries for parts production, design and services (Doellgast and Greer 2007: 66). For example, Ford has converted three parts plants into a new company, Visteon, and three transmission plants into a joint venture, Getrag Ford Transmissions (GFT) (Greer 2008: 189). Volkswagen has created a subsidiary, Autovision, providing support services and agency workers both to other Volkswagen plants and to external clients. In some cases, OEMs have settled operations in Eastern Germany in order to exploit lower production costs (most of all determined by low wages and incentives given by public authorities) (Scheuplein et al. 2007). These operations usually have much lower levels of vertical integration with respect to older plants (Greer 2008).

Another important element has been the externalisation of in-house service provision to external service suppliers. Outsourcing has traditionally taken place for the provision of materials and components, whose quota still account for almost 80% of outsourcing contracts. However, other areas have been increasingly reached by these developments (Legler et al. 2009: 53). In-house subcontracting has been initially very widespread for auxiliary activities, such as cleaning, catering or plant security. However, since some time now, also more central activities, such as logistics, maintenance and research and development have been outsourced to specialised service providers. According to a study undertaken by Meissner, for example, German OEMs have outsourced up to 30% of their development activities (Meissner 2013: 19). Today, the biggest German engineering service companies for the automotive industry count several thousand employees and account revenues for several million euro (Meissner 2013: 21).

This vertical disintegration process has produced the growth of an industry, the industrial services industry, which presents within its ranks giants of well over 50,000 employees worldwide (Meissner and Bochum 2011). These companies provide maintenance, technical cleaning, industrial assembly (Roland Berger 2010). Some of these companies, such as Schnellecke for logistics services, are

specialised on the automotive sector, while other cover broader spectrum of activity and encompass different industries.

It is extremely difficult to understand the number of external employees active in German automotive plants via subcontracting agreements. According to a survey undertaken by the IG Metall among works councillors, "besides the 763,000 stable workers, the automotive industry employs (...) 250,000 employees of subcontracting companies working in-house" (IG Metall 2013a). Some data are available for the metal sector more generally. According to an IG Metall survey among the works councils of 900 companies in Baden-Wuerttemberg, 73% of the companies outsource some activities. According to the works councils, up to 25% additional external employees are to be found on companies' premises (IG Metall 2011a).

A crucial element in this process is employers' perception of a differentiated value for different occupations and activities within metal and automotive industry. According to employers, the main point for their use of subcontracting lies in their perception of the adequate wage level for employees performing "easy" tasks. According to the head of the employers' association of the metal industry in the South-Western region of the country, *Suedwestmetall*, "especially easier and non-production activities have become too expensive in our country. If the companies did everything internally, paying these workers according to the metalworkers' collective agreements, profits would disappear, and thereby also the sustainability of our industry and its very well paid core workers" (Schiermeyer 2013). Again he argued that "there are tasks, for which the metal collective agreement is too expensive. If a workers does nothing else than control pieces, the current lowest wage level is not justified anymore. Also we have seen an increasing use of subcontracting" (Schiermeyer 2013).

Lastly, another instrument through which the industry reduced its vertical integration levels has been agency work. Indeed, since the liberalization of this form of employment through the intervention of the Schroeder's red-green government in 2003, the number of agency workers has shown a steady increase (Bundesagentur fuer Arbeit 2013: 6). According to the employers' association of the metal industry, *Gesamtmetall*, the metal industry employs 205,000 agency

workers, corresponding to 5.6% of the overall employment in the sector (Gesamtmetall 2012) and around 20% of all agency workers in the country (Bundesagentur fuer Arbeit 2013: 8ff.). No definite numbers are available on the incidence of agency workers within the automotive industry. According to the German Association of Car Industry (VDA), the car industry employed in 2012 around 60,000 agency workers (VDA 2013c). According to the IG Metall, instead, the number of agency workers is around 100,000 workers (IG Metall 2013a). In some companies, such as the well-known case of BMW in Leipzig, agency work counts up to 30% of the workforce (Benassi 2013: 8).

According to Dudenhoeffer and Buettner, agency workers are mostly used in production activities (64% of the companies), but almost one out of five companies (17%) use agency workers also in engeneering (Dudenhöffer and Büttner 2006: 33). Moreover, according to the study, if agency workers are more widespread among unskilled activities, representing 17% of all unskilled workers, there is a large number of agency workers also among skilled positions. Indeed, 7% of the so called *Facharbeiter* are agency workers (Dudenhöffer and Büttner 2006: 34). The fact that agency work is not used solely for low-skill activities, but increasingly takes place also in skilled ones, is confirmed also by other studies (Promberger 2012, Holst et al. 2010, Artus and Rossmeissl 2012).

Agency work has been traditionally considered as an instrument for responding to seasonal production peaks or for substituting workers on holiday or maternity and sick leave. However, several indicators suggests that this instrument is performing other functions in the German context. Indeed, the increased contract tenure ⁴⁶ and the growing share of companies with high percentages of agency workers within their workforce suggests that agency work has become a more stable component in HR management (see Benassi and Dorigatti in progress: 8ff. for a more thorough discussion). One important element is, indeed, cost reduction. In Germany, agency workers are cheaper than standard workers, because of the lack of a strict equal pay clause in the German law⁴⁷. In 2009 the wage gap between agency and metal

⁴⁶ According to the statistics provided by the Bundesagenture fuer Arbeit, contract tenure has extended over time: while in 2002 the share of agency workers with a contract tenure longer that 3 months was 44%, this figure increased to 54% 10 years later (Bundesagentur für Arbeit, 2013: 18).

⁴⁷ Since 2003, a reform of the Temporary Employment Act (*Arbeitnehmerueberlassungsgesetzt*)

workers was between 30 and 40% (Weinkopf 2009). Besides costs deriving from different wage levels, a further important reason relates to the possibility of circumventing the "shadow costs" of a redundancy and, thus, be able to rapidly adapt to market fluctuations, without bearing responsibility for employees (Interview 26).

Among the union's ranks, agency work is mostly interpreted as a cost-reduction instrument and an instrument to discipline the core-workforce (Interview 26). According to the official position of *Gesamtmetall*, instead, agency workers are used as substitutes for vacancies among direct employees (illness or vacation) or to respond to production peaks. However, an interviewee explicitly linked agency work to cost reduction (Interview 30).

5.2. Industrial relations under vertical disintegration

Several authors have argued that vertical disintegration has produced an erosion of the traditional industrial relations in the automotive industry (Greer 2008, Haipeter and Banyuls 2007). First, these processes have triggered a reduction in the field of application of the metal collective agreement and the deterioration of working conditions for involved workers. Indeed, employees at subcontractors are paid at less than direct employees at OEMs. This has happens through several mechanisms. First of all, OEMs have been usually characterized by a positive wage drift (i.e. they pay higher wages than what set in sectoral agreements). According to Juergens and Krzywdzinski, at the beginning of the 1990s, the effective income of workers employed at OEMs was between 30% and 40% above the level set in the sectoral collective agreement of the metal sector (Juergens and Krzywdzinski 2006: 6). Secondly, smaller suppliers are much more likely to use opening clauses to reduce labour standards (Haipeter 2010: 124). Thirdly, they are more likely to exit employers association in order not to be subject of the sectoral collective agreement

has set that agency workers are entitled to equal pay unless otherwise negotiated in a sectoral collective agreement (Bundesagentur fuer Arbeit 2013: 5). Immediately after the reform was passed, employers sought to exploit this possibility and entered negotiation both with a bargaining group of the DGB unions and of the Christian Trade Union Federation (Christliche Gewerkschaftsbund, CGB). The latter is well known for undercutting wages and working conditions set in DGB collective agreements (Dribbusch and Birke 2012: 6).

(Ellguth and Kohaut 2008). Lastly, as we have seen, they can sometimes apply different (and cheaper) collective agreements, such as those of the logistics, catering or cleaning industry or the specific agreement for the agency sector.

Thereby, outsourcing presents significant challenges for employees representatives. Indeed, outsourcing can threaten the job security of core workers because it opens up alternative (and cheaper) solutions for production. At the same time, it can also constitute a safe valve for them, since it may enable cost-cutting, without having to question core workers' conditions. How did, thus, employees' representatives respond to these challenges?

5.2.1. Pacts for employment and competitiveness

During the 1990s, these two elements (competition and protection) were somehow blurred within employees representatives' responses to vertical disintegration.

As it is well known, at the beginning of the 1990s, the economic viability of the German model was constantly under attack in what was defined as Standortdebatte, i.e. the debate on the competitiveness of Germany as a location for production. Indeed, critics of the traditional German model identified in the high wage costs and high social security contributions German companies had to pay the roots of the country's high unemployment and low growth rates (Juegens et al. 2006: 9). Thus, reforms were invoked both in the structure of employment protection (e.g. an easing of dismissals) and social security contribution, and in the regulation of collective bargaining (e.g. going towards more decentralisation) (Sinn 2003). Within this debate, the fact that employers relied on vertical disintegration as an "exit option" (as we have seen, offshoring, particularly to Eastern Europe, greatly increased in the second half of the 1990s, see Jürgens and Krzywdzinski 2009), further strengthened this argument. Moreover, this neo-liberal approach was underwritten by politics. Indeed, in the mid2000s, the red-green government of Chancellor Schroeder adopted this point of view as base for reforms which deregulated the labour market and reformed the welfare state.

Several interviewee argued that the presence of such a general consensus towards

the idea that employment could be boosted only reducing employers' constraints is important to understand the response given by employees' representatives to the issue of vertical disintegration (Interview 27). Workers' representatives, indeed, responded to these challenges through a strongly concessive attitude, which mixed concessions on behalf of the core workforce and segmentalist attitudes towards peripheral employees. The crucial goal in this first phase was to secure employment. As argued by Bispinck and Dribbusch, indeed, collective bargaining during the 1990s was characterised by the fact that "job security gained priority over most other issues on the bargaining agenda both at sectoral and at company level" (Bispinck and Dribbusch 2011: 26).

At national level, in 1995, the IG Metall advocated a so-called "Alliance for Jobs" whereby it offered wage restraints in exchange for job guarantees (Streeck and Hassel 2004). At plant-level, instead, the 1990s were the years of the so called pacts of employment and competitiveness. Those pacts foresaw an exchange between labour and capital, whereby the labour's side (generally works councils, but often also with the union involvement) accepted employers' goal of cost-cutting and the capital side guaranteed no forced dismissals and limited job and investment guarantees. The car industry was among the most affected by such pacts (Bispink and Dribbusch 2011: 45ff., Juergens and Krzywdzinski 2006).

Within these pacts, vertical disintegration played a crucial role in a double aspect. On the one hand, as we have seen, it was a "push" factor for the definition of such agreements. Indeed, in order to avoid companies to move further segments of the production process abroad or to national suppliers, works councils accepted concessions on several aspects of the employment relationship (with working time being the most widespread) (Jürgens and Krzywdzinski 2006: 35, Telljohann 2006: 292, Greer 2008).

On the other hand, however, vertical disintegration became a "bargaining chip" for getting allowances from the management. Indeed, outsourcing and agency work were often part of employers' cost-cutting strategies and, thus, entered pacts for employment and competitiveness as allowances given by labour in exchange for job security guarantees for the core workforce. According to Jürgens and Krzywdzinski, for example, between 1993 and 2006 the use of agency work was

one of the most common concessions made by works councils in the automotive industry (Jürgens and Krzywdzinski 2006). Similarly, Rehder argued that during the negotiations of several pacts for employment end competitiveness, employees representatives in the automotive industry accepted the outsourcing of certain jobs in order to secure employment (Rehder 2003).

These trends towards decentralised and local solutions were further strengthened in 2004, when the IG Metall signed the so-called "Pforzheimer Abkommen" which introduced opening clauses within the sectoral collective agreement of the metal industry⁴⁸. This agreement placed derogations (which during the 1990s assumed a "wildcat" character, Streeck and Hassel 2004) under the control of the social partners (and especially of the union). However, they kept the door open for concessive agreements, which often entailed a segmentation of the workforce.

Even when not specifically underwritten in pacts or opening clauses, moreover, cooperation between employers and works councils at the expense of peripheral employees was also visible in the way in which works councils dealt with those issues. Several empirical analysis, for example, have shown that, for a long time, works councils have used agency work as an instrument to buffer core employees and to allow for employers' requests of cost reduction without questioning working conditions for core workers (for a review, see Benassi and Dorigatti in progress). In several cases, works councils signed collective agreements shifting risks and costs from core to agency workers (Weinkopf and Vanselow 2008: 30).

Still, even in this first phase, characterised as it was by an hegemonic consensus on derogations and by the focus on job security as the most important goal, exclusionary practices were not the sole response given to employers' segmentalist strategies. In some cases, indeed, employees' representatives at plant level have opposed the use of outsourcing and agency work for avoiding a segmentation of working conditions at plant level. According to an interviewee, these different strategies strongly depended from the political orientation of works councils and to their commitment to working class solidarity. As he argued,

It has to be stressed that one of the main reasons why the IG Metall decided to abandon its opposition to the introduction of opening clauses within its sectoral collective agreement was the pressure exercised by the SPD-led government. Indeed, chancellor Schroeder threatened the union that the government would have introduced such an opening clause by law if the social partners would have not find an agreement (Juergens et al. 2006: 14).

there were works councils, some of them I even supervised for some time, they have strenuously opposed these developments since the very beginning. There were works councils that opposed these developments with success (...), there was no agency work. The works councils were proud of the fact that we had no agency work. We do not allow something like this to enter our companies. It was those that were politically strong that opposed these developments. But I think there were also those companies, that have let themselves been blackmailed and that were, I always argue that, politically very weak, badly organised, and perhaps even had works councils, that were politically not very aware with regard to this issue (Interview 27).

This confirms the findings of other studies which have argued that political orientation of works councils matter for determining core/periphery configurations at plant level and works councils attitudes towards peripheral workers (Benassi 2013, Artus and Rossmeissl 2012).

5.2.2. Concessions for avoiding outsourcing

Another strategy adopted with regard to outsourcing and vertical disintegration was the acceptance of concessions in order to keep work in-house. In several cases, this was, again, part of pacts for employment and competitiveness. Indeed, works councils and the IG Metall have sometimes resorted to specific agreements for workers employes in service activities in order to avoid the externalisation of these activities. These so called *Dienstleistungstarifvertraege* (service sector collective agreements) envisage a reduction of pay rates and/or an increase in working time without corresponding wage increases for employees performing auxiliary functions (such as cleaning and catering). They are negotiated in order to avoid outsourcing and make the provision of those services by internal personnel competitive with prices available on the market (Duennemeier 2008). Indeed, this model is considered to be "a response for (...) preventing outsourcing and employers' exit from collective agreement, as well as the division of the workforce" (Duennemeier 2008; 139).

Through this instrument, indeed, employees in service activities remain within the boundaries of the company and its workforce representation institutions and maintain their entitlement to company bonuses. According to the former head of the IG Metall in Baden-Wuerttemberg, "from our point of view, the negotiation of a

service sector collective agreement is a hard step, but from the perspective of our company, organisational and bargaining policy we see no other alternatives to an otherwise creeping outsourcing process" (Duennemeier 2008: 145).

However, such instrument was strongly disputed within the union⁴⁹, with a large part of IG Metall's members and officials opposing the introduction of lower pay grades for service workers (Interview 27 and 28).

According to a trade unionist

It is very difficult (...). Since quite a few years now, employers are trying to establish a lower pay grade, below the one set in the sectoral collective agreement, at plant-level through this instrument of the service collective agreement. The IG Metall never wanted to sign such agreements, because it always argued, if somebody is employed in an automotive plant, he should receive the metal collective agreement. So. But now you have these development with subcontracting agreements etc. and now the question is: if I define a second pay grade, below the one we agreed at sectoral level, I can perhaps curtail this uncontrolled growth of the subcontracted areas, in that the ones in these uncontrolled areas, where probably nothing is regulated, fall in this second level below the sectoral agreement. This is the core argument. But...It may also be so, but than I have bargained a second pay garde below the sectoral collective agreement, we do not want that" (Interview 29).

Thus, this strategy was never embraced at national level (Interview 27, Interview 29).

This view is confirmed also by the employers' side. Indeed, an interviewee argued that

when we discuss this issue here [at Gesamtmetall] (...), our collective bargaining expert argue "it makes no sense, the trade union will not go along" (Interview 30).

However, this strategy was undertaken in some single companies and in some regions. For example, the IG Metall in Baden-Wuerttemberg adopted this strategy as a way for avoiding outsourcing (Duennemeier 2008: 144). Still, it remained relatively circumscribed. Besides ideological reasons, this was due also to the fact that "the implementation of a service sector collective agreement with pay levels acceptable for the union requires an adequate organisational strength" (Duennemeier 2008: 146). This was confirmed by several other trade union officials, which argued that, where employees' representatives were not strong enough, employers simply pursued their outsourcing decisions. Indeed, even if they

⁴⁹ Talking with a trade unionist about the position of the IG Metall on the issue of specific collective agreements for service activities, I received such answer: "It is very dangerous wounds (...) you are insisting on, this issue has not been decided within the IG Metall" (Interview 29).

reduce them, service sector collective agreements set pay levels above those of rival collective agreements.

Service sector collective agreements are still considered viable options by several people within the union. In a presentation held during a strategic meeting on the issue of outsourcing and industrial services, for example, even the by the time deputy chairman (now secretary) of the union, Detlef Wetzel, argued that such agreements constitute instruments for "avoid outsourcing" (Wetzel 2012: 22).

5.2.3. Organising and recruiting

In more recent times, a new strategic orientation seems to have emerged within the union, namely that of regulating vertical disintegration through the recruitment and organising of subcontractors and agency workers and the extension to these workforce segments of the standards applied to the rest of the industry. According to Greer, this strategy was already present in some cases even before. He reports, for example, that, after the creation of a supplier park near the plant in Cologne, "representatives from the local IG Metall recruited union activists to take new jobs and set up works councils and in some firms won house agreements" (Doellgast and Greer 2007: 68). Similar strategies took place at Daimler's supplier park in Rastatt.

However, this strategy has acquired increased relevance in more recent times. Indeed, in the last few years, the IG Metall has undertaken initiatives to re-regulate work at the periphery of the automotive sector and of the metal sector more generally through campaigns addressing agency work and subcontractors.

Since 2007, the union has undertaken a campaign to affirm equal pay for agency workers. This campaign aimed at involving works councils in metal companies and to sign ameliorative collective agreements at plant level (Benassi and Dorigatti in progress). As a result of this initiative, several hundreds of plant-level collective agreements setting better working conditions for agency workers employed in the industry were negotiated. Moreover, in the 2012 bargaining round of the metal and electro industry the union has signed a collective agreement for the agency sector

defining bonuses that agencies have to pay for temporary agency workers employed in metal companies⁵⁰.

These bonuses depend from the duration of the assignment and range from 15% of the sectoral wage after 6 weeks of continuous deployment in a metal company to 50% after 9 months⁵¹ (Schumann 2013, see table 8 below for details).

Table 8. Additional payments agency workers metal and electro industry

After 6 weeks	After 3 months	After 5 months	After 7 months	After 9 months
15,00%	20,00%	30,00%	45,00%	50,00%

Source: Schumann 2013

Furthermore, the recent collective agreement grants works councils larger codetermination rights with regard to the deployment of agency workers and more leeway to control their deployment. Lastly, the agreement sets that after 24 months of continuous assignment to a metal company, agency workers have to be offered a direct position within the company.

This campaign was particularly important because it represented a more inclusive attitude of the union towards agency workers, both with regard to their organisation and the bargaining policies the union expressed.

Parallel to the campaign on agency work, the union has started to address the issue of outsourcing and subcontracting, with a special focus on in-house subcontracting and industrial services. The discussion on so called *Werkvertraege*, understood as subcontracting agreements taking place in-house⁵² (i.e. on the OEMs' premises) has, indeed, acquired a high relevance in the German debate on precarious employment (Koch 2012, Lorig 2012). In-house subcontracting has, indeed, been increasingly seen as loophole used by employers to circumvent the strecter regulation of agency work achieved by the union at sectoral level. This tendency has been indirectly confirmed by a seminar organized by the Centre for

A similar collective agreement was already signed in 2010 in the steel industry. The agreement, however, set a full pay parity for agency workers deployed in the sector (von Borstel 2010).

In any case, the sum of the collectively agreed pay and bonuses cannot overcome the 90% of the wage level paid to a comparable direct worker (Schumann 2013: 2).

Actually, this definition is inappropriate, since *Werkvertrag* (subcontracting agreement) do not encompass solely the provision of services in-house, but may characterize every contractual relationship taking place between two companies and implying the delivery of a good or service according to the specifications of the contract. Thus, for example, also the delivery of parts from a supplier can take place within the framework of a *Werkvertrag*. However, the current discussion mainly understands *Werkvertraege* as in-house delivery of goods and services.

Employment Relations and Labour Law with the title "Industrial services as alternative to regulated temporary agency work" (Rieble *et al.* 2012). According to several reports the initiative has been defined an "instruction manual to wage dumping" (Bognanni and Pennekamp 2011). Thus, it is seen as an attack against the union and its regulatory capacity.

Therefore, the union has been increasingly concerned with the issue and has started attempts to regulate it. Goals of the union's campaign are twofold. On the one hand, the IG Metall wants to establish its presence in the subcontracting industry by organising workers of metal (by now especially automotive) subcontractors and to bargain collective agreements in order to close the pay gap between them and workers in OEMs. On the other hand, the union wants to increase its control on subcontracting processes via companies at top of the automotive value chains. Central element of this idea is that works councils should strengthen their habit to get involved in the question of the personnel planning (Schwitzer 2012) and extend their representation domain on outsourced workers. For doing so, the union is asking for an extension of works councils codetermination rights in order to comprehend also outsourcing decisions. Implicit in this strategy is the idea that it is impossible to grant good working condition and to lower dumping risks through initiatives starting from the bottom end of the value chain, but that the strength of core workers is needed (Wetzel 2011).

In so doing the union wants to establish a new (and more inclusive) concept of the company (*ganzheitlich Betribsbegriff*) which does not encompass solely its juridical borders, but will set new political ones. As argued by the secretary of the organisation, Detlef Wetzel,

Therefore, we need a new, trade-union led, concept of the firm. According to this concept, our works councils, union representatives and the IG Metall as organisation would be responsible for the whole value chain (and therefore also for the agency workers, the suppliers and the service providers) not in a legal, but in a political sense. This responsibility along the value chain has a strong value-oriented dimension. Through this concept we argue that we are responsible for them because we are a trade union (Die Mitbestimmung 2011).

The initiative has started with several pilot projects financed through its investment fund (*Investitionsfond*)⁵³. Among them are two of the projects we will analyse in

The investment fund is a special fund created in 2009 by the union which provides economic support for organising and recruitment projects (IG Metall 2011: 160).

the plant level case studies, namely organizing attempts at Audi's supplier park in Ingolstadt and industrial service providers at Daimler in Sindelfingen⁵⁴ (Wetzel 2012: 21). Furthermore, the union is producing several information materials for sensitising works councils to the extent and consequences of subcontracting (IG Metall 2013b) and to explain them their influence possibilities (IG Metall 2011c). What is particularly significant is that target of this campaign are not just metalsubcontractors, but also subcontractors performing industrial services, which, as we have seen, either belong to the responsibility domain of other unions or have been until now tarif-free areas. A particular target have been logistics subsidiaries of the automotive sector. Company collective agreements (Haustarifvertraege) have been signed by the IG Metall in several logistic providers, especially in the Lipsia region, which is acting as a pilot region for this strategy. Employees at all the major players, such as Schnellecke, Rhenus Logistik and Rudolph Logistik, previously represented by ver.di, have started being organised by the IG Metall. In the last two years, several new collective agreements have been signed by the union. Working conditions are still at a lower level than in the sectoral agreement of the metal and electro industry, but these plant-level agreements have produced significant improvements. Indeed, they have reduced working time (from 40 to 37,5 hours per week), and increased wages (up to 400 euros per month) and leave days (four more vacation days per year) (Schulte 2011, Interview 24, Interview 25).

The campaign is considered as an extension of the agency work campaign. Indeed, according to an interviewee, they both insist on the same issue. With the words of the responsible for the campaign

This campaign on subcontracting was a logic development, a completion of the campaign on agency work, because both insist on personnel planning within the companies. And there, it is not sufficient to regulate a segment, e.g. agency work, but one has to look also at the other employment forms in the companies, what happens to them. Because otherwise...it does not make any difference for employers how the baby is called, for them it is important to get high flexibility and to pay as low as possible. Whether it goes through agency work, through subcontracting or through another employment form, this does not make any difference for them. The main thing is, that they have low costs and can let quickly people go (Interview 26).

A problematic point of the campaign is that it is causing the IG Metall problems

Other projects are the organising project among industrial service providers of BMW and Porsche in the Lipsia region, the organising of the Entwicklungsdienstleister at Ford in Cologne and at Volkswagen in Wolfsburg, the organising of suppliers and service providers in the automotive cluster in Saxony.

with regard to its relationship with other DGB unions. Indeed, the fact that IG Metall reclaimed responsibility for the whole metal value chain and, thus, also for those service companies which provide services to metal companies, has triggered tensions with other unions, and especially with ver.di, the service sector union. In some cases, tensions between ver.di and IG Metall even ended up in courts for defining the two unions' responsibility domain. However, the IG Metall is convinced that this is the right direction and is disposed to carry on the conflict. As argued by a trade unionist and by the secretary of the organisation

this is obviously a point (...) [where there are] also (...) conflicts with other unions. If we organise a logistic company, this applies the collective agreement of ver.di. And therefore there is resentment. But we think, we have to continue. We have to carry on this resentment. Because at the end it does not make sense that, due to this resentment, we are paralised and remain anchored to our old structures. We have to carry on this conflict (...) because without this conflict there is no possibility to progress and we have to progress (Interview 28).

The reality is, that the traditional organisational structures of the trade union are no longer compatible with what has taken place in terms of industrial transformations. For me it is important, that trade union in manufacturing sectors develop an understanding of how industrial services are linked with production and which segments originally belong to them. It is a shame for us, if in our value chains there are segments which are lousily paid, that have no works councils and no collective agreements (Die Mitbestimmung 2011).

5.2.4. How do trade unionists explain this change?

As we have seen, there has been a move from a tendency to made use of vertical disintegration as an instrument to ensure flexibilisation opportunities towards an increased engagement with the issue of subcontracting, aimed at organising workers employed by external firms and regulate their deployment and working conditions. How do trade unionists explain this change?

A crucial element raised in order to explain the union's strategic turn is the issue of competition between core and peripheral workers. Indeed, one of the major elements triggering the campaign on agency work has been the increased perception on behalf of the union that agency workers were putting pressures on stable workers' employment conditions (see Benassi and Dorigatti in progress). According to the union, the presence of "a permanent low-wage sector inside the firms" (Wetzel in IG Metall 2008: ii) makes core workers develop a "sentiment of

substitutability" (Dörre in IG Metall 2007: 8) and produces a disciplining effect on them (Holst et al. 2010). Thus, the union's inclusion of these workers and the struggle for equal pay can be interpreted as an attempt to re-regulate the labour market in order to protect core workers. As argued by the former secretary of the union at its 21st congress

We cannot allow agency work to keep creeping in stable jobs. This threatens our collective agreements and us all in the long run (Huber 2007).

Similarly, the most important trigger of the IG Metall's new orientation on subcontracting is identified by our interviewees in the fact that outsourcing is getting increasingly problematic for core workers. Indeed, the union is recognising the fact that outsourcing produces negative consequences not only for peripheral workers, but also for core ones. Indeed, according to a trade union document

both parts bear the consequences: outsourced workers directly – through the loss collective bargaining coverage and of income. The consequences on core workers manifest themselves in the long run. Increasing performance pressures and threats to working condition set in motion a vicious cycle at whose end are only losers on employees' side of employees" (IG Metall 2011c: 36).

What seems to be particularly worrisome for the union and differentiates current outsourcing processes from previous ones, making it unacceptable, is a change in the type of tasks performed by outsourced workers. According to an interviewee

what we had to acknowledge is that it is no longer, as it was in the past, single activities to be outsourced – cleaning personnel was no longer directly hired, but through external companies, the cafeteria was out. What is new in this in-house subcontracting and what concerns us very much is that these subcontracting agreements increasingly eat away bigger firms' segments. They have entered companies' core areas, such as development departments or production (...) It is no longer peripheral areas to be outsourced, also core areas are given outside. And also core workers understand that, because they fear for their jobs (Interview 26).

In a publication of the IG Metal in Baden-Wuerttemberg, the union describes the difference between older subcontracting and subcontracting taking place now in a similar manner.

Subcontracting was always present. (...) The difference is that once external companies took up activities, which did not require a specific competence and had no specific and immediate connection to the adding value of a company. Today, subcontracting agreements have often the goal, to pass core competences to "cheaper" providers, in order to remove responsibility for the workers and to put under pressure the workforce (IG Metall 2011a).

Moreover, the union raises the concern that subcontracting is substituting stable jobs. According to an IG Metall survey among works councillor of 900 metal

companies in Baden-Wuerttemberg, in 53% of the companies, outsourcing is used to substitute stable workers (IG Metall 2011a). Lastly, according to the union, subcontracting contracts (*Werkvertraege*) are increasingly used as a substitute of temporary agency work in order to overcome the regulation achieved by IG Metall and the bonus system negotiated for agency workers (IG Metall 2010).

Thus, according to the union, both workforce segments bear the overlapping interest of regulating subcontracting and external employment. Still, this awareness has required a great amount of persuasion work on behalf of the union in order to make works councils and core workers clear that to regulate subcontracting produces positive results for direct employees.

We had to make them very clear that, what we do today for these other workers, we do it not because we are bored, but in order to secure their jobs. We had to say "what you are doing for them, you are doing practically also for yourself (...) We always tell "Look, if we raise their wages and align them to yours, then we make also your job safer" (Interview 26).

This persuasion work was necessary because there were works councils and core workers which were convinced by the idea that subcontracting can be a buffer against market fluctuations. According to a trade unionist, instead,

where employees of subcontractors are active in the same areas, there it may be possible. But also there, this is true only to a certain point, because from this protection it is also very easy to move to blackmail. The question is always how many external workers are present in a company and how many contracts (Interview 26).

However, trade unions also recognised that solidarity may develop among core and peripheral workers.

People have, this was shown us by the agency work campaign, a very sane perception of injustice. And if you are able to pull agency workers and workers at subcontractors out of the anonymity, to give them a face, to say "here is an agency worke, he works at your place since two years, he does the same things you do, but gets half the wage", then it is very quickly indignation. So one can mobilise also core workers (Interview 26).

A last important point raised by our interviewees in order to explain the campaign was the fact that these processes are increasingly perceived as a threat to IG Metall's collective agreements and codetermination rights, and to the union's capacity to influence working conditions in the sector (Interview 27, Interview 28).

And therefore we have asked ourselves which value do our collective agreements have if large part of the people employed in our firms do not even fall under these agreements, but is outsourced under no collective agreement or under a worse one (Interview 26)

We have to react (...) to this increasing segmentation of industrial companies if we do not

want to come to a full erosion of interest representation and codetermination" (Interview 27).

Politically it is a very big issue for us as organisation, because subcontracting does often concern service areas and thereby these areas are separated from the metal industry, from our responsibility domain. And thereby the domain of our organisation is scaled down, the number of our potential members is scaled down and also the possibility to organise them. And thereby in turn also our strength, our power is scaled down (Interview 28)

Both with regard to competition and to the organisational interests of the union, what is important to highlight is the fact that the organisational strategies deployed by employers are considered to be attacks directed against established standards within the industry, works councils' codetermination powers and the IG Metall's position. As argued by the former deputy chair of the union, now secretary of the IG Metall, "these are wage dumping instruments" (Die Mitbestimmung 2011). This perception strongly contrasts with the idea, usually present in the dualisation literature, that these organisational measures were somehow "required" by changed economic and competitive conditions. This is very evident in the two quotes below, taken from an interview with the head of the IG Metall campaign department.

A political effect, when I move people out of core companies, is that thereby I weaken the works councils and I weaken the union. Which employer would not have such a result? (Interview 28).

I think that another aspect of these flexibilisation instruments...they concern international competitiveness, it is true, but even more important these are instruments for profit-maximisation. Because a point we have to underline is that in the last years, companies have actually gone very well, they have made a lot of money. We had a change, even in manufacturing companies, they want to achieve now extremely high profit margins (Interview 28).

It is beyond the goals of this research project to demonstrate whether employers' strategies are marked by the first or second range of goals. However, the fact that the union is perceiving these organisational measures as directed against itself and the standards it has bargained over time is very important for understanding its position. Indeed, this perception rules out the possibility to identify a commonality of interests between employers and core workers which, according to the dualisation literature is at the base of cross-class coalitions. Instead, it requires the union to act in order to re-regulate the labour market and to close off loopholes employers were using for circumventing employment standards within the industry.

5.3. Plant-level case-studies

We have seen in the previous paragraphs how the IG Metall's attitude towards external employment has changed and explored which factors have been related to this change. We aim now at looking at how this changing strategy has affected the strategic behaviour of plant-level actors. What concerns us is whether and how this strategy has translated into new orientations at plant-level. In order to look at this question, we have analysed three companies of the automotive branch. We will focus on how employees representatives have dealt with the issue of agency work and outsourcing, with a specific focus on in-house outsourcing.

5.3.1. Daimler

Daimler is a multinational company settled in Stuttgart which produces cars, trucks, vans and buses. In 2012, the Daimler group sold 2.2 million vehicles (of which almost 1.5 million passenger cars), totalling revenues of €114.3 billion (plus 7% with regard to 2011) (Daimler 2012). In 2012, it employed a workforce of 275,000 people worldwide, of which 160,000 in Germany. The Mercedes-Benz Car division employs 98,000 workers worldwide and is concentrated in the premium segment. In Germany, Mercedes-Bens Car has 17 production sites. This paragraph concentrates on the Daimler plants in Sindelfingen and Bremen.

The Sindelfingen plant is Daimler's biggest production plant and the biggest research centre for car production (Daimler 2014). It employs around 26,000 workers, 18,000 of them are employed in direct production. The near Mercedes Benz Technology Center employs 8,000 workers in R&D activities. The plant produces annually around 425,000 vehicles (Daimler 2014).

In Bremen, Daimler employs 12,800 workers. Both plants have a strong trade union presence: in Bremen, 70% of the workforce is member of the IG Metall (Interview 20), while in Sindelfingen this share is at around 80% (Interview 19). Of the 429 works councillors elected at Daimler during the last elections (in 2010), 365 belong to the IG Metall (Dribbusch 2012: 125). The Bremen works council is

an IG Metall closed-shop: all its 39 members belong to the IG Metall (Interview 20). In Sindelfingen the IG Metall has 44 out of 55 seats in the works council (Gester 2010). However, critical groups are represented within the Sindelfingen works council and they often oppose to the majority's decisions.

Agency work

Discussions on agency work started at Daimler in 2004, when the management started to push for its introduction within the company (Interview 20). This discussion took place as part of negotiations of a pact of employment and competitiveness called Zukunftssicherung 2012 (Ensuring the future 2012). Through the agreement, differentiated concessions were negotiated in order to contribute to the company's competitiveness. Indeed, the agreement allowed the company to save 500 million € per year in projected labour costs (Greer 2008: 191). Basic wages were reduced by 2.79% for all direct employees, while for new entrants wages were reduced by 8%. Thereby, a two-tier system was created within the company. The agreement also entailed the works council's consent to agency work. However, this form of employment was strictly regulated. A maximum number of 2,500 agency workers was allowed (this number counts for the sum of all agency workers in German plants), with a maximum quote of 4% in the single plants. In case agency workers outnumber the 4% quota, the company is required to enter negotiations with the works council, which has to express its consent to the extension of the quota. Usually, the counter-concessions required by the works council for allowing to extend the quota is either that agency workers get wage increases (in the form of additional shift allowances as paid to the direct workforce) or the hiring of some of them into the direct workforce (Interview 19). Thereby, the works council has been able to negotiate transitions from agency to direct employment. Lastly, the agreement also entailed provisions to link agency worker's pay levels to those set in the metal collective agreement. Indeed, agency workers are paid as skilled new entrants (i.e. as workers which have complete the period of vocational training) and receive an hourly wage of around €18 (Interview 19). This is a much higher wage level than that foreseen in the collective agreement of the

agency sector and even to that bargained by the union at sectoral level in the form of the above mentioned additional bonuses. Still, a full equal pay is not present at Daimler, since agency workers lack all over-tariff bonuses granted to Daimler direct workforce.

It is important to notice that the agreement applies solely to agency workers deployed in direct production activities. No regulation is present with regard to agency workers in indirect activities, neither with regard to maximum numbers nor pay levels. Thus, they are paid according to the collective agreement of the agency sector plus the additional wage bonuses bargained by the union at sectoral level. Here, one can see an indication of what the works council considers as problematic, i.e. agency workers in production activities.

In 2010, this plant-level agreement was renegotiated and the maximum quota was extended to 8% (Behruzi 2010, alternative 2010). However, this quota does not only apply to agency workers in production activities, but also to fixed-term contracts. Thus, what was renegotiated was a merger of the two 4% quota already existing with regard to these two flexible employment forms. Hence, according to the supporters of this new agreement, nothing changed through the new agreement. According to its critics, instead, the new quota increased the company's possibility to make use of agency work, since the company usually prefers hiring agency workers rather than fixed-term ones. This was confirmed also by some interviewees, which argued that there are only agency workers in production.

Thus, the works council's strategy with regard to agency work shows some ambiguity. The quote set by the works council is relatively narrow with respect to other OEMs (also if we consider the new 8% quota), where agency work in production activities reaches peaks of up to 30-40% (see Benassi 2013 for a comparison). However, the works council has given its consent to the increase of the number of agency workers immediately after the crisis. Moreover, on the one hand, the chair of Daimler's general works council, Erich Klemm, expressed criticism against Daimler's post-crisis personnel policies and most of all, against the fact that Daimler strongly relied on agency work for managing the upswing. As the works councillor argued, this was the problematic "downside" of the company's success (Brennpunkt 2010: 2). Indeed, as reported by the journalist Daniel Behruzi,

he signed a declaration with other works councillors of automotive companies in Baden-Wuerttemberg arguing that

with apprehension, we have to acknowledge that employers are trying to cover their personnel requirements after the crisis through agency work and other forms of precarious employment. Agency work constructs first- and second-class employees within the companies. This is contrary to our self-understanding, that equal working conditions for all employees constitute a minimal requirement for justice. We do not accept a two-classes society within our companies (...) Works councils and trade unions have increased companies' room for flexibility through collective and plant-level agreements (...) Thus, we do not need to rely on modern day labourer to react to production peaks" (IG Metall 2010: 1).

However, with the acceptance to increase the quota for agency work, he also showed its understanding for the company's unwillingness to hire direct personnel. As reported by critical works councillors, the general works council accepted Daimler's argument that the company did not know how long the boom would have been and, thus, could not hire new direct personnel (alternative 2010: 1).

This ambiguous position was also visible during the crisis. In 2008, Daimler in Sindelfingen employed around 900 agency workers, whose contracts were not renewed during the downturn. The information journal of the trade union's representation body represented agency workers as a "crisis buffer" (Brennpunkt 2010: 8). Indeed,

during the crisis, there were so good as no agency workers within the company; since mid 2008, the at the time around 2,500 agency workers in the company were send home in several waves. Thereby, and through the use of working-time accounts and short-time working schemes (*Kurzarbeit*) it was possible to overcome the crisis without firings of direct employees. Agency workers buffered the worse effects of the crisis away from Daimler-core workers (Brennpunkt Juli 2010: 8).

No judgement was expressed in the article with regard to the evaluation of this state of affairs (i.e. whether this buffering function was good or bad), but surely the fate of agency workers was not taken into consideration. Moreover, the works council did nothing in their favour during the crisis. So, even if there is a self-understanding that agency work is unjust and unequal, it seems that, in exceptional times the defence of core-workers gets priority over equality preoccupations. This approach of the general works council was contested by the oppositional faction within the works councils and even by some IG Metall works councillor (alternative 2010).

According to our interviewee, currently agency work is at around 3% at Daimler in

Sindelfingen, below the level set in the plant-level agreement. Agency workers are mostly deployed in production activities (especially in the assembly of the C-model) and in the canteen, but agency workers are present also in clerical occupations (especially as secretaries) and in research and development. In Bremen, there are currently 300 agency workers, which is slightly below the 8% quota.

According to the two works councillors, the quota is generally hold and has often been the instrument through which the works council has pressed for direct hiring of agency workers (Interview 19, Interview 20). Still, in recent negotiations on external flexibility at Daimler and the introduction of a social charter for subcontractors, the company required an increase in the quote of agency workers. However, the general works council strongly opposed this request (IG Metall Daimler 2013). This was one of the main reasons why, as we will see below, negotiations on the social charter failed.

Subcontracting

According to several sources, Daimler has traditionally been the most vertically integrated large German automaker (Greer 2008: 191, Juergens 2003). According to the IG Metall, indeed, up until 1996, its vertical integration level was at 42.3%. Still, since the end of the 1980s, this level reduced by almost 8% (cit. in Greer 2008: 187).

It is extremely difficult to map the extent of subcontracting at Daimler: employees' representatives do not have a clear overview of the issue (according to a trade union official, "even works councillors mostly have no idea on that. This is a big problem", Interview 18) and the management refused to speak about it⁵⁵. According to a works councillor of Daimler's plant in Bremen, the company employs around 3,000 workers through subcontracting agreements (Interview 20).

According to our interviewees, in-house subcontracting agreements are quite removed from actual production (Interview 19). This was confirmed also by the

⁵⁵ According to an interviewed works councillor, this was due to the fact that, as we will see below, Daimler has been under the spotlight for in-house subcontracting over the last year (Interview 18, Interview 19).

chair of Daimler's general works council, even if he argued that their number is increasing.

In production, in-house subcontracting agreements have played a subordinate role. Still, since a couple of years their number is clearly increasing in several plants, especially in logistics activities (IG Metall 2013b).

Still, this idea was strongly question by a television report⁵⁶ broadcast in March 2013. Indeed, the report scandalized the very poor working conditions suffered by workers employed by Daimler's subcontractors directly at the assembly line. A journalist of the broadcasting station *Suedwestrundfunk* took up a job as agency worker and was deployed by a logistics subcontractor, Preymesser, at the Daimler plant in Untertuerkheim. For two weeks, he worked side by side to Daimler employees, packing engine components and preparing them for being sent to China. He did the same job Daimler employees were doing and was often instructed by them. However, his hourly wage was €8.19, two-thirds below Daimler direct workers. The report raised great debate in Germany and put Daimler under the focus of the public opinion. However, the company strongly disputed its content, arguing that the journalist was not integrated into Daimler's production process and, thus, the contract was a legal form of subcontracting.

It is not clear in how far works councillors were unaware of these developments or simply tolerated them. As we will see below, however, such media attention has triggered a more proactive action on behalf of the union (Interview 18). Still, it suggests that, at least in some plants, in-house subcontracting is practised also in activities close to production.

In-house subcontracting also takes place in maintenance activities, which have been externalised to providers of industrial services. Voith Industrial Services⁵⁷ and WISAG Production Services⁵⁸ are the biggest players. According to an interviewee,

The title of the report was "Famine wages at the assembly line: how collective agreements are cancelled" and was directed by the journalist Juergen Rose.

Voith is a multinational company active in the provision of industrial services for several industries (construction, chemical, automotive, aerospace, food and beverages, mining, paper, etc.) in over 50 countries. Within the automotive industry, Voith provides services ranging from technical cleaning and facility management to assembly and engineering services. Worldwide, the company employed 43,000 employees in 2012, 17,000 of which (around 40%) are employed in Germany. In the same year, the company accounted for €5.7 billions sales (Voith 2013). Industrial services represent 21% of the company's overall sales (Voith 2013: 72).

WISAG is a multinational company belonging to the AVECO group. WISAG is a holding which comprises three companies: WISAG Aviation Service (airport services, passenger services),

at Daimler sites in Stuttgart (which comprise the two Untertuerkheim sites, Sindelfingen and Carstatt) Voith employs around 1,300 workers. Only in Sindelfingen, workers employed by Voith for providing maintenance activities at Daimler are 700 (Interview 18). They are active especially in technical cleaning and facility maintenance (such as tribology, maintenance of air pipes, etc.). WISAG, instead, employs around 800 workers in the four Daimler plants in Stuttgart (Interview 18).

With regard to their employment conditions, workers at Voith and WISAG are applied much lower standards than employees at Daimler. Both companies have a collective agreement with the construction union IG BAU and their employees are paid according to the collective agreement of the cleaning sector⁵⁹ (*Gebaeudereinigung*). With regard to representation structures, employees at Voith are represented by a works council. However, according to an interviewee, works councillors are mostly lower managers and, thus, the body works more in the interest of the company than those of of the workforce (Interview 18).

Lastly, there is a large number of subcontractors providing R&D activities. According to the head of the general works council, R&D subcontractors employ several thousands of workers (Behruzi 2011).

Daimler has been theatre of major counterpositions when the management exposed outsourcing plans. However, this was very differentiated in the different sites. For example, the workforce and the works council in Bremen have always been very critical to the management's outsourcing decisions. Here, the works council has a strong wing of leftist activists, which has strongly contested managerial choices. According to a works councillor,

there were several confrontations, there were also several strike actions. In Germany this is something unusual (...). Therefore one can say this is not a workforce that accepts everything (Interview 20).

In 2012, the management put over plans to outsource the internal logistics. The company's workforce undertook several protest actions (2,000 workers went on

WISAG Facility Service (catering, cleaning, security and gardening services) and WISAG Industrial Service (maintenance, industrial cleaning, production logistics, assembly). WISAG Production Services is a subsidiary of WISAG Industrial Services and provides industrial cleaning, assembly and production logistics. The group employed around 23,000 workers in 2009, accounting for €0.8 billions (Meissner and Bochum 2011: 25).

As we have seen in the previous chapter, the collective agreement of the cleaning industry ranges between €1490 and €2518 gross monthly. The collective agreement of the metal and electro industry between €2042 and €5257 gross monthly (WSI 2013).

strike) and the management had to abandon its plans (Interview 20). The main reason for this opposition was related to the fact that those positions enabled older workers to perform lightier activities when they get unable to work at the assembly line (Interview 20).

Colleagues are angry, because the concerned jobs gave the possibility to workers with bodily limitations to remain employed within the company (Bremen macht Feierabend 2012).

In 2004, a major question arose with regard to support services, and especially catering, cleaning and security. This took place within the negotiations of the above mentioned pact of employment and competitiveness, *Zukunfsicherung 2012*. In order to avoid outsourcing, the general works council and the local trade union branch, included in the pact reference to a supplementary collective agreement (*Ergaenzungstarifvertrag*) defining special provisions for indirect services. Activities covered by the agreement were catering, security, postal and communication services, facility management and logistics (Daimler 2004). The agreement raised working time for concerned employees from 35 to 39 working hours without a corresponding wage increase, and it introduced a new regulation (less favourable for workers) with regard to the system of shift and overtime allowances. Moreover, wages for workers employed in those activities were reduced by 20%.

The agreement raised a heavy debate within the IG Metall, among workers and works councillors (see alternative 2005). Indeed, the introduction of a two-tier system for workers employed in service activities was disputed as a breach to solidarity and equality. According to an interviewee,

There were several actions and strikes within the whole group, but at the end the decision was taken. But among the local bodies [the works councils] there were several voices opposing it, there was a big campaign, it was almost half half within the workforce. Some have argued, "yes, through this instrument we secure something, we protect these activities from outsourcing", the others have said, "no, this is only the first step towards outsourcing". But at the end the decision was taken by the majority, but it has been proved, that this will not last long (Interview 20).

However, the general agreement set for the whole operations in Germany had to be translated in site-specific agreements by the local works councils which had to identify which service segments would have fallen under the special provisions of the service sector contract. In some cases, such as at the Untertuerkheim site, the works council decided not to ally the agreement (Interview 19). Our interviewee (the chair of the union representation body of the Sindelfingen plant) did not gave other informations on the reasons why the agreement was not applied in Untertuerkheim⁶⁰, but ha argued that this decision brought to the outsourcing of parts of the activity segments which would have fallen under the *Dienstleistungstarifvertrag*.

Respondent: I have to stress that, for example, the site Untertuerkheim decided not to apply the service sector contract. Therefore, several parts of the logistics services (...)

Interviewer: were they outsourced?

Respondent: Yes.

Interviewer: Because the works council did not accept this service sector contract?

Respondent: Exactly.

Interviewer: So, the discussion was either service sector contract or outsourcing?

Respondent: Exactly.

Still, several interviewee point to the fact that this collective agreement did not set a stable solution for those activities. According to a Bremen works councillor, "today, the management would better not have this whole service sector contract and go directly towards outsourcing" (Interview 20). This was confirmed already in 2007, when the company presented a plan, strongly contested by the works council and the IG Metall's representative in the supervisory board, to outsource plant security and fire brigades. According to the plan, these measures would have affected around 830 employees in Germany and would have ensured cost savings of up to 45% (Automobilwoche 2007). Tomas Klebe, the IG Metall's representative in the supervisory board, defined the measure a "retreat from a way we have until now commonly gone through" (Automobilwoche 2007). The company actually resigned the agreement for some activities and outsourced them to external companies. In Sindelfingen, this was the case for some segments of the plant-security, which have been already contracted out (Interview 19).

⁶⁰ Attempts to organise interviews with the works council in Untertuerkheim failed, since the works councillors refused to talk about the issue.

New action on subcontracting

Since march 2013 a new initiative on industrial services was undertaken by the IG Metall in Baden-Wuerttemberg as part of the national campaign on subcontracting initiated by the union. This initiative aims at establishing the presence of the IG Metall among subcontractors in the metal (and especially automotive) industry, build up works councils and establish the metal collective agreement along the value chain of metal companies. By now, the initiative has mostly concentrated on people employed in the two subcontracting agreements Voith and WISAG have with Daimler (Interview 18). The project was initiated in March 2013 by the regional trade union and a trade union official was hired in order to coordinate it. The union has established first contacts with Voith's and WISAG's employees. Moreover, the union has developed a working group (Arbeitskreis) made up from Daimler's works councillors and members of Daimler's trade union representation body (Vertrauensleutekoerper) for dealing with the issue of working conditions among subcontractors (Interview 18). This group should aim to connect employees' representatives at Daimler with those at subcontractors and constitute a system for ensuring that the former will care about employees at subcontractors. In this sense, it constitutes a way to enlarge employees' representatives representation domain. By now 120 workers at Voith in Stuttgart were organised. The trade union official which is responsible for the campaign argued that the next general works councils

which is responsible for the campaign argued that the next general works councils elections⁶¹ will be the occasion to present IG Metall lists and to try to define a new works councils (Interview 18).

At Voith, however, this goal is endangered by the fact that, as we have mentioned

At Voith, however, this goal is endangered by the fact that, as we have mentioned above, the company already has a works council, which is dominated by lower managers. Furthermore, the company has traditionally fallen under the responsibility domain of the IG BAU, the trade union of the construction sector. Competition is arising between the two unions for defining their respective responsibility domain. Our interviewee argued that the presence of the IG BAU is sustained by Voith, because they have collective agreements with lower standards. However, he argued that the IG Metall is better positioned to defend the interests of

In Germany, works council election take place contemporary at all plants within a general works councils election which takes place every four years.

these workers because it is closely connected to Daimler works council and, thus, can act via a higher level. Moreover, he also implicitly referred to the fact that the concurrent trade union has never given great attention to the workers. Indeed, he argued that, within the 10 months of the campaign, the IG Metall has organised more workers than the IG BAU. However, it seems clear that between union competition contributes to weaken the union and has become a weapon in the hand of employers for strengthening tendencies towards segmentation of working conditions along the value chain.

Parallel to this action within subcontracting companies, the general works council at Daimler is pushing for an agreement on subcontracting. However, the management is reluctant to negotiate over the issue, arguing that this constitute "a breach on managerial freedom" (Interview 18). Negotiations started after the above mentioned television report on low-wage work among Daimler's subcontractors was broadcast. However, the general works council and the management could not find an agreement on the issue and negotiations broke down. Immediately afterwards, on October, the 8th, 2013, the company unilaterally dispatched a social charter setting minimum standards for employees of subcontractors. According to the charter, suppliers have to observe minimum standards with regard to their employees' health and safety. Furthermore, they have to pay at least the lower wage level of the sectoral collective agreement of their activity sector, independently of whether they are members of the respective employers association or not (Stuttgarter Zeitung 2013). An audit team should randomly prove suppliers' compliance with the social charter.

This move was strongly contested by the general works council. First, the works council argued that the social charters' provision on pay levels (i.e. the oblige to pay at least the minimum level of the sectoral collective agreement) were not wide enough to ensure a "fair and adequate compensation" (Klemm in Handelsblatt 2013) and to prevent wage dumping among subcontractors. Instead, the works council fostered the oblige to ensure the whole application of the collective agreement, respecting workers' correct grouping in wage levels and providing the observance of yearly bonuses, vacation time and other collectively agreed standards. Second, the works council criticised the voluntary character of the

instrument, which gives to employees' representatives no tools to combat violations of the set principles.

The increased engagement of the general works council with working conditions among subcontractors was also visible in another episode. In Fall 2013, the works council pushed for transforming 1,400 workers employed by subcontractors in agency workers. According to the chair of the Sindelfingen works council and chair of the company's general works council, Erich Klemm, this aimed at improving their working conditions, by including them within the realm of the works council's codetermination and by ensuring that they receive a pay level corresponding at least to the collective agreement for the agency sector bargained by the IG Metall in 2012 (IG Metall 2013b).

As for the reasons triggering these new initiatives, the trade union official responsible for them argued that

we also want, in the long run, to protect the core workforce. If we look at a department which could be outsourced, here, lets' say, work 100 people. They get $\[mathebox{\ensuremath{\mathfrak{e}}}\]$ per hour, for example. So. If the department is outsourced to any external company and this latter hires people for $\[mathebox{\ensuremath{\mathfrak{e}}}\]$ 10-12. If we are able, as IG Metall at Daimler, to negotiate collective agreements for external employees, which go in the direction of the sectoral collective agreement of the metal industry, than it is no longer convenient for the management to outsource. Because, for example, if Daimler pays $\[mathebox{\ensuremath{\mathfrak{e}}}\]$ 20 per hour and the pay level in the metal industry is $\[mathebox{\ensuremath{\mathfrak{e}}}\]$ 16-17, if we are able to bring pay levels at subcontractors at that level, than the management will think about it, i.e. whether it makes sense to outsource for 2-3 euro difference (...). Today it is very lucrative for employers, because they see, they pay $\[mathebox{\ensuremath{\mathfrak{e}}}\]$ 18 internally and can go down to $\[mathebox{\ensuremath{\mathfrak{e}}}\]$ 29. One saves a lot of money. Exactly this gap is what we want to reduce (Interview 18).

5.3.2. Audi

Audi is a premium car producer which belongs to the Volkswagen group. In 2012, Audi produced 1.3 million vehicles, with €48.8 million total revenues (Volkswagen 2012a: 108). Ingolstadt is Audi's biggest production plant worldwide. At the location, the company produces the models Audi A3, Audi A4, Audi A5, Audi Q5 and Audi TT (Audi 2013). In 2012, 550,000 vehicles were produced there. Audi employs in Ingolstadt more than 35,000 workers, 15,000 of which are employed in

direct production. 80% of the workers are skilled workers with a vocational training in the relevant metal occupation. Usually they receive their vocational training directly at Audi. In 2012, the company had 550 trainees.

Audi is an IG Metall stronghold. Indeed 80% of the workers are trade union members, but production workers belong by 98% to the union. The union also controls the works council. Indeed, of the 90 elected works councillors during the last election round in 2010, 77 belong to the IG Metall (Dribbusch 2012: 125). *Agency work*

At time of the interview, Audi Ingolstadt employed around 900 agency workers (Interview 14). Most of them (around 700) are deployed in assembly activity, another 150 in logistics and the rest in other production activities (painting). No agency workers are present in clerical occupations or in R&D. According to a works councillor, Audi deploys agency workers only to cover production peaks, especially at the start of new production models. It is not a structural component of the workforce.

It is very important, that we have agency workers only to cover production peaks. When production runs at a normal level, so when we have no additional activities, we actually have no agency workers. Or just 10, 20 or so. But in any case, agency work is used only to cover production peaks (Interview 14).

Still, the same works council also argued that agency work is used as a flexibility buffer. What she excludes is that agency work is used as a cost-containment measure.

For Audi, the point is not the cost of agency work. For Audi, the point is the possibility to have a certain flexibility, so not having personnel ties when something goes wrong (Interview 14).

Agency work first appeared at Audi Ingolstadt in 2003. According to the chair of the local IG Metall district, which is also responsible for the plant on behalf of the union, before that time Audi never relied on agency work, but made use of fixed-term contracts when the company launched new models and needed additional employees (Interview 15). However, due to the increased number of produced car models, the company started considering fixed-term contracts as insufficient. Thus, it started employing agency workers. According to the trade unionist,

At first, we did not even realise that at once in Ingolstadt, on a big industrial space, a container appeared, where around 300 agency workers from the East of the country...so young skilled workers, were stationed in a container, young workers which then worked

The presence of such a big number of agency workers, poorly lodged on the company's premises, was the trigger for regulation. Indeed, the union started to care about the condition of these workers, to talk to them and to organise them into the union ranks. According to the unionist, the difficult situation experienced by these workers and the resentment it raised facilitated their organisation (Interview 15). The union encouraged agency workers to elect a bargaining commission in order to develop the bargaining platform and to start negotiations with Adecco and Tuja, the two biggest agencies active in the region, where agency workers were employed (Mueller 2011). The high unionisation rate of Audi's agency workers and their willingness to fight (even to enter on strike) gave the union strength in the negotiation (Interview 15). Finally, the two agencies gave in.

Crucial points for the workers were, besides wages, home trips and accomodation. The final collective agreement set compensation for home trips and regular vacation days on the week end in order to be able to get back home. Furthermore, it was one of the first collective agreements in the country linking agency workers' compensation to the collective agreement of the metal and electro industry. The agreement was renewed in 2007 after the stipulation at national level of the new collective agreement for the agency sector. The new agreement maintained the link between the pay of agency workers and pay standards in the metal industry by defining a system which is very similar to the one negotiate by the IG Metall in 2012 at national level. Indeed, agency workers are paid according to a bonus system: Adecco and Tuja pay according to the sectoral collective agreement of the agency sector plus a bonus which increases progressively with the length of their tenure⁶² (IG Metall 2007). Moreover, the agreement sets that agency workers at Audi will enjoy pay increases deriving from the yearly collective bargaining rounds of the metal and electro-industry. Thus, their pay is fully anchored to that of direct employees.

Furthermore, the chair of the IG Metall union representation body at Audi argued

⁶² According to the collective agreement, agency workers employed at the assembly line earned €13.70 until the third month of assignment, €14.43 afterwords. Agency workers assigned to non-assembly activities, but in support functions get €12.51 independently from the duration of their assignment.

that the introduction of additional wages on part of Audi also forced agencies to raise their general wage levels, because otherwise they would have not fine people to employ (Mueller 2011: 30). Moreover, until today the union has been able to organise the vast majority of agency workers employed by Audi.

Parallel to the IG Metall collective agreements with the two agencies, the Audi works council negotiated in 2003 a plant-level agreement with the company. It is important to note that regulation of the issue at Audi in Ingolstadt has always seen the union and the works council work side by side. The plant-level agreement set different points. First, it defined the areas to which agency workers could be assigned, namely only to production activities. Indeed, according to a works councillor

we said, there can be agency work solely in car production areas, at any place where employees work at cars. We do not want agency work in technical and development activities, no agency workers in the quality control, in no specialistic field. Because we envisage these jobs for our colleagues, which can also be further trained accordingly (Interview 14).

Secondly, the agreement introduced a maximum quota for agency workers set at 5%. Moreover, it sets that, when the number of agency workers overcomes the quota, the company is obliged to hire external employees. Normally, it is the same agency workers who are employed. Through this instrument, the works council has been able to ensure the permanent hiring of several hundreds of agency workers (the last collective hiring of agency workers took place in March 2013, when 350 agency workers were hired by Audi "under pressure of the works council", Audi Betriebsrat 2013) during the last decade. Indeed, even if the plant-level agreement does not entail regulation with regard to transition form agency to direct employment⁶³, the works council usually ensures that, after a period of time, agency workers enter Audi's direct workforce (Interview 14). On the works council's page within the company's website, the permanent hiring of agency workers into the core workforce is counted as "a success and a milestone" in the yearly appraisal of its activities (Audi 2014). Thus, agency work has become an important recruiting mechanism for Audi near the apprenticeship system (interview 14).

⁶³ Currently the maximum assignment time for agency workers is set by the IG Metall collective agreement at sectoral level. After 24 months of continuous assignment, agency workers have to be hired permanently.

Through this agreement, the Audi works council has been one of the first in Germany to regulate the issue of agency work (for a comparison with other OEMs see Benassi 2013). Moreover, the chair of the local IG Metall district considers the company a sort of vanguard in the debate on equal pay for agency workers (Interview 15).

Even if the trigger of regulation has been the indignation for very poor working conditions for agency workers, an interviewed works council also recognised the beneficial effect a stricter regulation has also for core workers. Indeed, according to her, agency workers may constitute a threat to core ones, especially with regard to performance benchmarks.

Agency workers are very hard-working people, and obviously they go hard, because they always have in mind the possibility to become members of Audi's workforce. And this is somehow also a threat for our members, because they have to keep up with that. A worker with a stable employment relationship, if she is ill, she probably remains at home, while an agency worker comes to work even if she is ill, because she will be probably perceived negatively if she misses a week (Interview 14).

Thus, ensuring better working conditions and more protection to agency workers also means reducing this threat (Interview 14).

In 2009 the plant-level agreement on agency work was renewed and a provision related to pay levels of agency workers was introduced. Indeed, the agreement states that agency workers at Audi have to be paid as new hires directly employed by the company. So, they are grouped in the wage group 4, which corresponds to a pay of €16,30 per hour. Still, several elements distance agency workers from a full equal pay. Indeed, they do receive only a limited yearly bonus, no shift allowances and no participation in the company's profits or in its pension scheme.

The commitment of the local IG Metall and of Audi's works council for agency workers was visible also during the recent crisis. Fearing massive layoffs, in 2009 the union with the support of the works council negotiated an agreement with Adecco and Tuja for ensuring agency workers fired from Audi some forms of job security. The agreement rested on three pillars. First, half of the agency workers at the time employed by Audi (i.e. around 400 workers) would have the possibility to be hired by a transfer company, whose aim would have been to provide them qualification measures and their re-placement to other companies. Agency workers transferred to the new company would have been entailed to a job guarantee of 4

months and got 75% of their last net income at Audi. Second, another 200 agency workers would have had a job guarantee of 2 months at their employing agency. All other agency workers and the ones which did not accept these measures would have been entitled with a compensation (its level was set in a third of a gross monthly wage per every year of employment) (IG Metall 2009).

According to the chair of the IG Metall Ingolstadt district, Johann Horn,

we have been able to assert a fair wage for agency workers at Audi not only in good times. Also in times of crisis agency workers have to be treated fairly – for this stands the IG Metall (IG Metall 2009).

According to Horn, this result was possible thanks to the high unionisation rate of agency workers at Adecco and Tuja and the support of the IG Metall union representation body at Audi.

Subcontracting

As all major OEMs, Audi has undertaken significant restructuring processes in its value chain. According to an analysis of the company's balance sheets produced by the IG Metall, in the four year between 1994 and 1998, Audi has reduced its vertical integration level by 4%, from 35.2% to 31.5% (cit. in Greer 2008: 187). Since the mid1990s, the engine manufacturing has been substantially moved to Audi's new plant in Gyoer, Hungary (Juergens and Krzywdzinski 2006: 13). Moreover, there has been an increased tendency to purchase components within the Volkswagen group.

On the contrary, on Audi's premises, there are no in-house subcontracting agreements for production-related activities. Indeed, all auxiliary functions (such as maintenance and logistics, but also catering) are still performed in-house. Solely cleaning and construction activities are given to external companies (Interview 14). Instead, on-site subcontracting takes place mainly in highly-skilled activities, i.e. in R&D (Interview 15). According to the head of the local union, indeed, several thousands of engineers are employed through subcontracting agreements at Audi's R&D department (Interview 15). Engineering service companies have normally no works council and do not apply a collective agreements. Their employment

conditions are widely differentiated: some of them earn more than Audi's direct employees, but several other have much lower pay (Interview 15).

Outsourcing decisions, especially those related to the allocation of production in- or outside the company, are mostly dealt with within the company's subcontracting commission. This is a joint committee composed by managers and employees representatives. According to an interviewed works council, the main parameter guiding employees' representatives action within this body is the full capacity utilisation at the company's two German sited (Interview 14). Indeed, as argued by the works councillor

first of all, to the fore is the full capacity utilisation of the plants Ingolstadt and Neckarsulm. We have a capacity level, so in Ingolstadt, of around 600,000 cars. They have to be produced annually, and therefore, even if something is cheaper somewhere else, first of all we have to ensure the capacity utilisation in Ingolstadt. This stands also in the agreement we have negotiated with the management (Interview 14).

The works councillor refers to the employment security guarantee (*Beschaeftigungssicherungsvereinbarung*) negotiated several times at the plant since 1993 in exchange for working-time flexibilisation and wage restraints (Juergens and Krzywdzinski 2006: 14). This employment security clause guarantees a minimum amount of car to be produced at the plant. If this is not reached, outsourcing cannot take place. Still, this clause has never been a major problems, neither for the works council, nor for the company's outsourcing decisions. Vertical disintegration processes have taken place within a context of massive growth of the company. Indeed, Audi moved from employing in Germany less than 34,000 workers in 1991 (Juergens and Krzywdzinski 2006: 13) to around 50,000 today (Volkswagen 2014). Thus, outsourcing processes have never endangered occupation levels at the plant.

In the mid 2000s, a major counterposition took place with regard to support services inside the plant. Indeed, the company advanced plans to outsource industrial services (such as catering, IT, facility management) to an autonomous subsidiary. According to a publication produced by the union representation body at the plant, with this move the company wanted to increase those workers' working time to 39 hours, reduce their wage levels below the standards of the metal industry, and remove them from the Audi bonuses system (wir 2005: 4). According to what reported, in the company's plan, outsourcing would have involved around

6,000 workers.

The managerial request started a fierce counterposition between the management on the one hand, and the works council and the IG Metall on the other (wir 2005). According to the former chair of the general works council, Xaver Meier, "from then on, we had to fight hard for an alternative" (wir 2005).

The result of this fight was a new company-level agreement negotiated in 2005 by the general works council of Audi and the company and called "Future Audi. Effort, Success, Participation", which, besides several other measures, entailed a service sector contract (*Dienstleistungstarifvertrag*) negotiated by the company and the regional union. The collective agreement had to be applied to employees working in catering, security, facility management, administrative services and transport logistics (Audi 2005). This involved around 1,500 workers in the two plants. Goal of the agreement was "to achieve competitiveness and economic feasibility as well as the maintenance and the re-incorporation of jobs in the industrial services areas" (Audi 2005).

In order to reach these goals the working time of workers employed in the above mentioned activities was increased from 35 to 37 hours per week without a corresponding wage increase. In exchange, the company committed itself "not to outsource any of the industrial services areas mentioned in the plant-level agreement or significant sub-portions of these areas in new companies or in any other manner" and "to proof whether areas falling in the above description, which have been outsourced in the past, could be re-internalised within a company of the Audi group" (Audi 2005).

According to our interviewees, this supplementary agreement remained in force until 2011. After that, employees in the concerned activities returned to a normal working time as a request of the union and the works council. As argued by an interviewee

it was a hard conflict, but fortunately, we have been strong enough and have been able to bring everybody back to the normal working time (Interview 15).

On the contrary, no extension of regulation has been bargained at plant level with regard to external subcontractors. According to an interviewee, the company applies the Volkswagen social charter, which requires suppliers to ensure minimum standards for their employees (Interview 14). Interestingly, this social charter is now one of the bases of the new organising campaign undertaken by the union in the supplier park (see below for further details). Lastly, according to the chair of the local union, the IG Metall and the works council are trying to bargain a regulation for subcontractors in R&D activities (Interview 15). Negotiations are currently undergoing, but the head of the local union seems to be very confident to the possibility to get an agreement (Interview 15). Still, due to the negotiation process and the fear of possibly endangering it, he provided no further information.

The supplier park

The most wide ranging initiative with regard to subcontractors, is the new campaign undertaken by the IG Metall in Ingolstadt for organising the company settled within Audi's suppliers park (*Gueterverkehrszentrum*, GVZ). The park was constructed in 1995 as a joint initiative of Audi and the city of Ingolstadt⁶⁴. It is located in the immediate nearness of the Audi assembly plant in Ingolstadt and was established in order for Audi to have the most important sequential suppliers located close to the factory. According to the head of the local IG Metall branch, the construction of the supplier park did not take place as a consequence of a specific outsourcing wave at Audi, but was more an attempt to redefine the company's supply chain (Interview 15).

Today, 30 to 35 companies are settled within the park and they employ around 4,000 workers. The park counts some large companies employing up to 800 workers, and several small companies employing 5 to 10 workers, sometimes working inside the premises of larger suppliers. Audi also has a site in the suppliers' park. It employs 1,500 workers. Settled companies are divided between logistic providers and assemblers. Logistic providers employ around 1,500 workers and their duties are mostly to stock pieces and modules provided by suppliers in their halls and deliver them just-in-time to Audi. Among them are well known logistic specialists for the automotive sector, such as Schnellecke, Scherm Tyre & Projekt

Investors and owners of the supplier park are IFG Ingolstadt, a company owned 100% by the city of Ingolstadt, LGI GmbH, its subsidiary jointly owned by IFG Ingolstadt and Audi.

Logistik, and Hansmann. Production companies, instead, employ around 900 workers. They perform production functions and build modules like fuel tanks, front-end modules, door trims, and tyres (IFG Ingolstadt 2014). These modules are then delivered "just-in-sequence" to Audi (Interview 16).

The interconnection between the supplier park and Audi's plant is well expressed by this quote taken from the company's informative site on the supplier park.

The material delivery takes place through electrical hoists which drive the material directly to the assembly line around 2,500 times a day over the 415 meters long bridge encased in the supplier park (Audi 2013).

Companies settled in the park generally have poor working condition, and a weak or non-existent trade union. Moreover, only a minority of them has a works council. This is particularly true for service companies, which also present a very high share of unskilled and migrant workers. Indeed, according to our interviewee, wage levels are particularly low for employees of logistics providers, while workers in production companies are generally paid at levels comparable to those of the metal industry. Still, even those production company which apply an IG Metall collective agreement, do not apply the sectoral one, but have specific company level agreements. Other production companies, instead, do not apply any agreement, but orientate to its wage levels for compensating their workers.

Even though the park exists already since 1995, trade unions have still a scarce representation within the park. Before the beginning of the campaign, a trade union official present with an trade union representation body was (Vertrauensleutekoerper) solely three of these companies, all performing production functions. According to an interviewee this was due to the fact that the supplier park had not a clearly planned development, but grew over time. Thus, at the beginning, workers employed there were quite few, and their number increased over the years (Interview 16). Still, the head of the local trade union also admitted "we have somehow slumbered over this development, we have not really understood it" (Interview 15).

A first initiative to regulate working conditions inside the suppliers park was attempted jointly by several unions belonging to the DGB in the mid 2000s. However, due to difficulties to coordinate and the scarce commitment by some of

the unions, this initiative did not bring to great results and was abandoned in the subsequent years (Interview 15).

Two years ago, the IG Metall claimed responsibility over the whole suppliers park as activities belonging to the Audi value chain and therefore pertaining the metal sector. A union official has developed a project for organising the suppliers park, build works council and bargain collective agreements. First goal of the project for the IG Metall was to establish itself as the recognised representative of the workers within the park. For doing so the union has started to carry on weekly information hours within the park and monthly information initiatives (on topics such as working hours, collective agreements, works councils), and has organised a working group composed of works councils and union representatives of the already organised companies. This working group operates in strong connection with Audi employees' representatives, thereby representing a first attempt to define a common platform and representation structure (IG Metall 2014). Until now, the union has been able to recruit around 300 workers in the park. One major victory has been the election of a works council in the biggest logistic provider settled in the park, Scherm Logistics, which employs 800 workers. This victory is particularly significant because the company had a strong anti-union attitude and has constantly tried to hinder a works council election (Interview 14). A works council is currently under construction at Schnellecke and Hansmann, two logistics companies. Moreover, the IG Metall will take the chance offered by the new general works councils election in 2014 to call for elections at the largest companies and to present its candidates (Interview 16). Within the realm of the campaign, negotiations for a collective agreement are undergoing in two companies. The next step of the campaign will be to establish a social charter of the supplier park setting minimum standards for all employees within the park and functioning as a base for the negotiation of collective agreements in the single companies (Interview 15).

Moreover, the campaign is also trying to strengthen the responsibility of Audi for its supply chain. According to the trade union official in charge of the campaign, this takes place with reference to the social charter named "Declaration on social rights and industrial relations at Volkswagen". This charter is an International

Framework Agreement (IFA) signed by the Volkswagen group, and the company's European works council, World works council and the International Metalworkers' Federation the in 2002, which applies to all Volkswagen operation in the globe and was renewed in 2012 in order to include first tier and logistic suppliers⁶⁵. According to the charter "Volkswagen supports and expressly encourages its contractors to take this declaration into account in their own respective corporate policy. It views this as an advantageous basis for mutual relationships" (Volkswagen 2012b). Beyond reference to ILO conventions (such as the ban of forced and child labour and the commitment to equal opportunities), the charter sets principles related to employees' health and safety, working hours, freedom of association, and fair compensation⁶⁶. Particularly the two latter points will be relied on new campaign on the supplier park. According to the trade unionists which is leading the campaign,

we are currently working to take off this charted from the shadows and to bring it to the public discussion, with the request that also in the supplier park works councils are elected and collective agreements signed. So that we can start this process as part of this social charter (...). Also with regard to how Audi has to deal with the supplier park and which responsibility it has to take for its suppliers (Interview 16).

The use of the International Framework Agreement (IFA) to push the recognition of works councils and collective agreements in Germany is particularly relevant, since IFAs are normally considered useful mostly for developing countries.

According to the head of the local, the initiative was undertaken because the union did not want to have such a big number of workers without any collective agreement and any co-determination structures (Interview 15). According to him this is problematic also because

this has side-effects also on other companies within the local. Because wage levels are generally pushed down, codetermination gets weaker, because you have such big areas without codetermination, and therefore other companies may take example and possibly follow it (Interview 15).

According to him, direct competition with Audi employees is however not present.

⁶⁵ According to an interviewee, this process was initiated by the Volkswagen works council, thereby signaling a more active approach of Volkswagen's employees representatives with regard to the issue of subcontracting (Interview Daiker).

With regard to compensation, the charter sets that "the compensation and benefits paid or received for a normal work week correspond at least to the legally valid and guaranteed minimum. In case legal or collective bargaining regulations are not existent, branch specific tariff compensation and benefits are used as an orientation that are customary to the respective location and ensure an appropriate standard of living for the employees and their families" (Volkswagen 2012b).

This is due to the fact that employees at Audi are very well organised. Still, the official in charge of the campaign highlights that these conditions produce a sentiment of "precariousness" also among stable employees

I would not say there is a direct threat for core workers at Audi, I think that the works council and the union representation body can control these processes, what is inside and what is given to external companies. But the negative effects are those that develop in the head of the people. They know there are other people, also in the supplier park, that do their same job for much less money or even for the half of the money. It is so, as I said, a sentiment that develops (Interview 16).

5.3.3. ZF Friedrichshafen

ZF Friedrichshafen is a first-tier supplier for the automotive industry. It is active in the design and manufacturing of driveline and chassis technology especially for cars and commercial vehicles, but also for boats, helicopters, and other vehicles. ZF is among the top 10 companies on the ranking list of the largest automotive suppliers worldwide (ZF 2014). In 2012 ZF accounted revenues for €17.3 million, €5.8 millions in Germany (ZF 2012:). Worldwide, the company employs almost 75,000 workers in 121 production sites in 26 countries. In Germany, ZF employs 43,000 workers (ZF 2012: 12). Friedrichshafen is the company's historical seat, the seat of its research and development centre. In Friedrichshafen ZF employs around 9,000 workers, 2,500 in R&D, 3,500 in direct production and the rest in administrative activities (Interview 21).

Agency work

At time of the interview, ZF employed 60 agency worker in production activities and 220 in the R&D department. According to the company's CEO, agency work is not a big issue for ZF, since around 2-3% of the company's German workforce are agency workers (Novak 2013).

In the year 2011, the local union branch bargained a firm-level collective agreement on flexibilisation instruments. Among other issues, the agreement also deals with the issue of agency work, identifying when agency workers can be used, how long they can remain within the company, how many agency workers ZF can

employ, and how they are to be paid. As for the first point, agency work can be used solely for "accomodating temporary fluctuations in demand or for handling incoming work tasks of a merely transient nature" (ZF 2011: 4). Thus, according to the agreement, agency work cannot be a stable component of the company's personnel policy. This is confirmed also by the fact that agency workers can remain within the company solely for a limited period of time. Their maximum deployment time is different for workers employed in production activities and for workers employed in R&D. Indeed, employees grouped between wage groups E1 and E10 (generally corresponding to production workers) can be deployed for a maximum of six months, while employees categorized between the E10 and E17 wage groups (usually in R&D) can be deployed for a maximum of 24 months. According to our interviewee, this is due to the fact that the company has no R&D projects lasting less than two years (Interview 21). This differentiation, however, make also clearly visible where the works council identifies the problematic aspect of agency work, namely for those workers employed in production activities. A quota is set at maximum 380 workers. If the company wants to overcome this quota, it has to get the agreement of the works council. In case of a refusal, a joint committee composed by members identified by the two parties, decides whether the deployment of additional agency workers is admissible according the function assigned to this instrument by the collective agreement, i.e. to cope with production peaks.

Lastly, the agreement sets agency workers' compensation. Indeed, agency workers employed by ZF are entitled to additional payments with respect to what set in the collective agreement of the agency sector. Hourly wages range from 13,02 to 28,50 € per hour. This is also slightly above what bargained at national level by the IG Metall. Wage levels slightly above the wage level corresponding to the highest possible *Branchenzuschlag* (which range from €12.29 to €27.30).

According to the works council's deputy chairman, Achim Dietrich-Stephan, "this agreement had to be negotiated longly" especially with regard to the pay issue (Wex 2011). Moreover, for gaining these positive elements on agency work, employees representatives exchanged concessions on internal flexibility, allowing the company to increase the number of job contracts with more than 40 hours per

week above what set in the collective agreement⁶⁷. Thus, the protection of agency workers came at the expense of concessions for core ones.

Subcontracting

According to a works councillor, ZF employs around 800 workers through subcontracting agreements. They are employed mainly in logistics activities, facility management, light maintenance and IT. The works council has no information on wage levels and the presence of collective agreements among subcontracting companies. Catering, instead, is carried out through an autonomous subsidiary belonging to the ZF group, ZF Gastronomie Service.

According to a works councillor a major outsourcing wave took place in the early 1990s as a consequence of the state of crisis in which the company was involved at that time. Several indirect activities, most of all craft activities such as the locksmith's and carpenter's department, were outsourced as an instrument for cutting costs and increasing the company's competitiveness. According to a works councillor "all these outsourcing measures took place for increasing the competitiveness of ZF" (Interview 21). This outsourcing wave took place with the consent of the works council, as part of the company's social plan (*Sozialplan*) (Interview 21).

In 2000, the company outsourced IT-services, together with the canteen and a part of the maintenance activities. During the phase of outsourcing, the works council had an interest in clearly separating those activities that had to be carried out by subcontractors and those to be performed internally. Moreover, the works council wanted to keep more skilled activities in-house. Thus, only "easier" maintenance activities were outsourced, while the more demanding and skilled activities were kept in-house as an explicit request of the works council (Interview 21). According to a works councillor "we have set only the boundaries, what do the subcontractors and what do our people. This was important for us" (Interview 21).

With regard to catering activities, the decision to construct an autonomous

 $^{^{67}}$ According to the metalworkers' collective agreement, up to 18% of a company's workforce can work longer than 35 hours. This share was set at 70% at ZF.

subsidiary belonging to the ZF group was, again, a consequence of works council's requests. At time the outsourcing process took place, indeed, the works council did not want the canteen to be given to an external company, in order to be able to keep influence over these employees' working conditions. Today, ZF Gastronomie Service employs around 80 employees, which are represented by the ZF works council. Moreover, even if the company applies the collective agreement of the catering industry, the works council has bargained an additional agreement which sets that employees are paid around 10% more than the collectively bargained wage levels (Interview 21).

During the crisis, some subcontracting agreements were canceled (especially in the maintenance activities) in order to prevent the core workforce to enter a short-time work scheme (*Kurzarbeit*) (Interview 21). Thus, external employees were used as a buffer to protect core workers. However, the interviewed works councillor argued there are relatively few areas in which such buffering is possible (according to him, solely maintenance activities, which are relatively few). Subcontracting, thus, does not represent a buffer from market fluctuations.

With regard to subcontracting activities not taking place in-house (such as components or parts production), managerial decisions are discussed within a subcontracting committee. As in the case of Audi, this subcontracting committee is jointly composed by works councillors and management representatives. It discusses make or buy decisions, i.e. what the company does in-house and what is given outside. According to an interviewed works council

about subcontracting (...) there are always cases when the company comes and says "we cannot reach the price targets of our customers. We have offers form external companies, that can make this production 30-40% cheaper". Then there are actually cases, when we say "Ok, thereby can we do the rest and the product has still a survival opportunity". Then we are ready to accept, if there are no direct problems with our workforce (...). In the long run, this may mean that that work is gone. But this has usually economic reasons, that, I would say, have not to do with profit maximisation, but with the fact that only in this way we have a possibility to survive. So, for example, at the case department, where we make the cases for the gear box, (...) there we operate as follows: it was approved that we make 50% of the cases and the rest is done by external companies, outside ZF, that simply have a better cost-structure. And in the combined costing is the case competitive (Interview 21).

The works councillor did not specify what exactly constitutes a more conform cost structure, but we can suppose that wage levels are part of it. Still, the works councillor does not consider this kind of subcontracting as problematic. Indeed,

according to him, "this takes place outside the plant. More crucial is when subcontracting takes place in-house" (Interview 21).

New action on subcontracting

The works council is getting increasingly involved into the issue of subcontracting. As part of the collective agreement on the use of flexibility instruments, the works council has obtained information rights on subcontracting. According to the agreement "the works council in Friedrichshafen will be informed by ZF at least twice a year on the number and the content of subcontracting agreements taking place at the Friedrichshafen site. There is agreement between the social partners that no "concealed" agency work can take place through subcontracting agreements" (ZF 2011). This latter point seems to be of particular importance for the works council. Indeed, both the works council and the local trade union which has signed the agreement fear that subcontracting agreements may constitute an instrument to circumvent regulation over agency work. According to Lilo Rademacher, the local IG Metall official in charge of representing ZF (which signed the flexibilisation agreement) "after the introduction of legal and collectively bargained regulations on agency work, many companies try to circumvent it through subcontracting agreements" (Mommsen 2014).

Still, the works council argued that this information right has been widely neglected by the company, which has informed only once (in 2011) over the stand of in-house subcontracting. Another problem with regard to the effectiveness of this regulation, is that the managerial interface of the works council, which normally is constituted by the personnel department, often has no competence on subcontracting agreements, since all decisions run through the purchasing department. Thus, it is not an adequate point of reference.

As for the reasons of the works councils' involvement in the issue, the interviewed works councillor argued that it is becoming a "political issue" for the union and, therefore, also for the works council. According to him, "for some time, we had the issue of agency work and of bad working conditions. Afterwords, we have regulated the issue of how ZF employs agency work. However, you still have a

two-classes society within the company if subcontractors employ workers at very bad conditions. This topic has simply gained more sensitivity, both in the public opinion and among the workforce. They even argue to the works council "Great, we have regulated agency work, but the company XY, which makes here the service XY for us, they have employees, which get $\[mathbb{e}\]$ 7.90 per hour. What will you do about that?"" (Interview 21).

Table 9. Wage segmentation and works councils' strategies at analysed metal companies

		Daimler	Audi	ZF
	Position in the value chain	OEM	OEM	First-tier supplier
	Employees	26,000 Sindelfingen 12,000 Bremen	35,000.	9,000.
Pay setting	Regular workers	Sectoral agreement + bonuses Industrial services: service sector contract (longer working time 40h, and lower wages, 20% below)	Sectoral agreement + bonuses	Sectoral agreement + bonuses (around 12% yearly wage)
	Subsidiaries	None	None	ZF Gastronomie: collective agreement of the catering industry, but with increased wage levels (by around 10%).
	Agency workers	According to the metal collective agreement (agency workers paid as skilled newentrants, around €18 per hour)	According to the metal collective agreement (agency workers paid as skilled newentrants, around €16,30 per hour)	According to own regulation (higher than the sectoral wage bonuses, €13.02 − €28.50)
	Subcontractors	Other collective agreements (not specified)	Other collective agreements (not specified) Supplier park: orientation to the metal collective agreement (production companies), other collective agreements (logistics companies)	Other collective agreements (not specified)
External flexibility	Agency work	Moderate use (currently 3-5% in Sindelfingen, around 8% in Bremen)	Moderate use (5%)	Moderate use (around 4%)
	Subcontracting	Limited in-house (around 800 in Sindelfingen), extensive for R&D	Extensive for R&D, very limited for production activities, supplier park	Moderate in-house (around 800) and only for peripheral activities
Works	Agency work	Acceptance	Only for covering production peaks and	Only for covering production peaks and

council's position			vacancies	vacancies
	Subcontracting	Opposition to outsourcing (service sector contract since 2004) Acceptance for subcontracting, but request of regulation	Opposition to outsourcing (service sector contract 2005-2011) Acceptance for subcontracting, but request of regulation	Acceptance of outsourcing for more cost- effectiveness (1993), but only for peripheral activities Acceptance for subcontracting, but request of regulation
Regulation	Agency work	Maximum 8% (if overcome negotiation with the works council) Pay according to the metal collective agreement since 2004 Works council's pressure for direct hiring after some time	Maximum 5% (only in production activities) Pay according to the metal collective agreement since 2003 Works council's pressure for direct hiring after some time IG Metall agreement on employment security during the crisis	Maximum 380 agency workers (around 4%) Pay according to own regulation (higher than the sectoral wage bonuses, €13.02 − €28.50) Maximum assignment: 6 months in production, 24 months in R&D
	Subcontracting	Transformation of subcontracting agreements in R&D into agency work for better regulation IG Metall campaign on industrial services	IG Metall campaign in the supplier park Regulation currently taking place for R&D subcontractors	Information rights on subcontracting agreements (2011)

5.4. Conclusions

The chapter has shown the responses given by employees' representatives in the automotive sector to vertical disintegration processes. As already stressed, we have concentrated mostly on segmentation processes taking place in-house or in the immediate nearness of the OEMs premises.

As we have described in the chapter, the strategy of the IG Metall towards these processes has started to change since the second half of the 2000s. The union has moved away from a tendency to leave the regulation of this issue at plant level and increasingly engaged with the issue. Indeed, since the start of the campaign on agency work in 2007, the union has made the regulation of the periphery of the labour market a crucial element in its bargaining agenda. Equal pay for agency workers has been a crucial point in the 2012 bargaining round and efforts to improve working conditions among subcontractors have become a priority for the union. Moreover, the IG Metall has embraced a new, more encompassing concept of its representation realm, one which includes not only workers employed in automotive companies, but all employees involved in the automotive value chain. Thus, the union has progressively opened up its boundaries in order to include agency workers and workers employed by subcontractors.

Another significant point is how this strategy materially operates. Indeed, what seems to be particularly innovative is the attempt to move up the value chain also with regard to responsibilities for working conditions. Taking into account the fact that new inter-organisational relationships developed through outsourcing and subcontracting have somehow questioned the figure of the employer (since it is not only the direct employer that influences the employment relationship, but also the contractor through the subcontracting agreement, see also Grimshaw and Rubery 2005), the union is trying to get influence on working conditions of peripheral employees by acting through the contractor. Thus, besides attempts to directly organise subcontractors and negotiate with them, the IG Metall is pushing for the involvement of works councils in contracting out companies and the negotiation of plant-level agreements setting rules on working conditions among subcontractors.

As we have seen, at the base of these efforts is a new concept of the firm that does not stop at a firm's boundaries, but extends to encompass other economic relationships. Thereby, it seems that the IG Metall is adapting its organisational model to the changed organisation of production processes.

As for the reasons of this changing strategy, our interviewees have mainly highlighted two elements. First, both with regard to the agency work campaign and the campaign on subcontractors, a fear that peripheral employment could pose a threat to core workers. The growth of an unregulated periphery, indeed, is considered to be detrimental for core workers' employment conditions. Moreover, the changing nature of these employment forms (massive growth since the Hartz IV reforms with regard to agency work and closer to OEMs' core business with regard to subcontracting) explains why this strategic turn is taking place now. Indeed, up until the point in which both were marginal phenomena, relatively separated from the core workforce, a strategy of exclusion could turn beneficial for core workers, since it did not affect them and, conversely, might protect them by constituting a buffer. Now that it is getting closer to the core of automotive companies, this unregulated periphery is getting problematic for core workers, triggering regulation efforts. A second reason expressed by our interviewees was that this growing periphery is increasingly problematic also for the union, since it endangers the IG Metall's power position, by opening up "exit options" for employers and reducing its representation realm. Moreover, the role of employers have been highlighted. Indeed, these organisational measures are considered an attempts by employers to circumvent regulation and, thus, an attack against the union.

A very important point has been to look at the plant level. Indeed, as we have highlighted in previous chapters, a part of the literature is pointing to the existence of differentiated interests between trade unions and works councils, exacerbated by the growing power attributed to works councils as a consequence of decentralisation processes (Pulignano and Doerflinger 2013, Hassel 2012). These accounts raise two problematic points. First, regulation at lower levels might entail more segmentalist strategies targeted to protect the core workforce. Second, inclusions attempts on behalf of the union might not get implementation at the plant level, because of works councils using peripheral employment as an

instrument to protect the core workforce (Pulignano and Doerflinger 2013).

Still, a strategic orientation pursuing segmentation in order to protect the core workforce was hardly visible visible in our case studies. Indeed, in all our cases, works councils attempted, if not to block, at least to milder the negative effects of segmentation (see table 9 above for a comparison).

This was especially true with regard to agency work. In all three cases the works councils (in close cooperation with the local IG Metall) have negotiated plant-level agreements setting relatively low quota (among 5% and 8% of workers in production), and created a connection between the pay level for agency workers and the metalworkers' collective agreement, thereby pushing towards equal pay. In two cases (Daimler and Audi), a strict regulation was achieved right from the beginning, far before the union started its campaign. On the contrary, at ZF, the agreement on flexible employment (which, as we have seen, entails provisions both with regard to agency work and subcontracting) was negotiated as part of the works council's engagement with the IG Metall's campaign on agency work and subcontracting.

With regard to subcontracting evidence is more mixed. Employees' representatives have been much more careful in dealing with outsourcing measures entailing the transfer of employees. Thus, at both Audi and Daimler, the works council opposed to the outsourcing of service activities (cleaning and catering). However, they accepted a segmentation of working conditions for these employees in the form of service sector collective agreements. Still, what seems to emerge from these two cases, is that the works council adopted such a strategy in order to keep those activity segments within their representation realm and to ensure them better working conditions they would otherwise have had on the external labour market. Moreover, it took the strength of the works councils to keep these groups in-house, since, according to our interviewees, managerial preferred option would have been to proceed to a wholesale externalisation. What seems interesting is that this solution was strongly contested among works councils and the union. This suggests that within the IG Metall ranks there is still resistance towards hypothesis of segmentation.

This regulation attempts, however, took place only in cases where outsourcing

implied the transfer of co-workers to external companies. When subcontracting came as part of new companies entering activity fields previously carried out internally, but without implying a transfer of personnel, it was, instead, substantially neglected. Thus, works councils have neglected segmentation entering their plants through this channel. Only recently works councils are attempting to define rules on outsourcing processes and to take care of in-house subcontractors. This, is, however, more a product of the new IG Metall's campaign on subcontracting, than an autonomous initiative by the works councils.

Surely, episodes in which works councils gave priority to the core workforce were not absent. This was particularly true within crisis situations. At Daimler, for example, works councils did not care about agency workers during the downturn, developing a crisis management strategy focused exclusively on core workers. Moreover, after the crisis, the general works council accepted a very contested extension of the agency work quota for enabling the company to manage the upswing without increasing its direct headcount. However, we have also seen that in other cases, such as Audi, the union and its representatives at Audi have developed an inclusive approach to their crisis management and developed initiatives to protect agency workers.

This suggests that the construction of solidarity between different workforce groups is a difficult political effort, one which is always subject to be redefined and questioned. As we have seen, in our cases, the inclusion of peripheral employees came as a consequence of an ideological commitment to equality by works councils. As argued by our interviewees, for politically engaged works councils with strong connections with the union (as those in our cases), dualisation has difficultly been an option. When confronted with employers' vertical disintegration strategies which promoted segmentation, they have attempted to milder it. Still, this commitment might be endangered when material interests between different workforce groups are perceived as contrasting. Thus, ideology per se is not always able to prevent employees' representatives to accept segmentalist strategies. However, what seems to be changing within the union's ranks is exactly this perception. Indeed, the union is developing an effort to show the threat coming from an unregulated periphery. Even if direct competition between core and

peripheral workers was not present in our cases (possibly due to the strength of employees' representatives which have blocked the entrance of subcontracting agreements to core areas of the company), several interviewee have raised the issue of core workers experiencing a perception of precariousness due to the presence of insecure workers (Interview 16, Interview 18). Thus, the possibility to insulate oneself through the construction of a buffering periphery seems to be less viable.

Chapter six

The chemical and metal cases: a comparative perspective

As we have seen in the previous chapters, vertical disintegration processes have produced a segmentation of working conditions within companies. This has happened in slightly different ways in the two industries. Within the chemical industry, the massive outsourcing of support functions (triggered by employers' willingness to cut costs) has produced a deterioration of the employment conditions of workers in those functions and progressively opened up the gap between the standards these workers are applied and those applied to workers in production companies. Moreover, pressure on wages has been further exacerbated by the exposure of service companies to competition with cheaper external service providers belonging to other industries. Less important have been, instead, both the issue of agency work and of in-house subcontracting, which are, however, acquiring new relevance in more recent times.

Within the metal industry, instead, the direct expulsion of service functions from production companies into autonomous subsidiaries has been less dramatic. In all analysed companies, several auxiliary activities (such as catering, security, and logistics) are still provided in-house, often, as we have seen, due to works councils' resistance to vertical disintegration. However, outsourcing threats have triggered concessions with regard to the employment conditions of workers in support functions, producing segmentation within metal companies' workforces. Moreover, subcontractors applying other collective agreements are diffused within automotive companies, especially in the realm of industrial services, and they do usually apply much lower standards in comparison to those applied to to the direct workforce. Similarly, the increased reliance on agency work has produced the growth of a workforce segment with different terms and conditions of employment.

Even if through different processes, thus, the consequence of vertical disintegration in both industries has been that formerly unitary structures (such as a chemical production site or a metal company) now host a multiplicity of employment conditions within their borders. Furthermore, these processes have generally produced a polarisation in working conditions between employees performing "core" functions and those employed in support activities⁶⁸.

The research question lying at the heart of this dissertation concerned the role played by employees' representatives within these processes. As we have seen in the first chapter, indeed, the literature has formulated diverging hypothesis with regard to how trade unions and works councils deal with segmentation.

Highlighting the presence of differentiated interests between different workforce groups, the dualisation literature has argued that, hardly pressed by managerial requests of cost cutting, workers' representatives in core firms tend to allow segmentation to take place (via the acceptance of subcontracting and agency work) in order to protect the core workforce. This approach highlights an increased predominance of company loyalty over working class solidarity which expresses itself in particularistic (and segmentalist) styles of interest representation. The emergence of such a tendency is favoured by the loosening of institutional connections between different levels of employees' interest representation (namely trade unions and works councils) via instruments of collective bargaining decentralisation (such as opening clauses and pacts of employment and competitiveness) (Pulignano and Doerflinger 2013). According to this accounts, segmentation is thus triggered by employers, but employees representatives (especially at plant-level) act as consenters of these tendencies.

On the contrary, discussions based on the power resource approach have argued that it is the weakness of employees' representatives to explain the spread of segmentation. In these accounts, vertical disintegration has been an instrument of "institutional avoidance" (Doellgast et al. 2009: 363, Jaehrling and Mehaut 2013) which has enabled employers to circumvent regulation. According to this approach, employees' representatives have been increasingly been unable to close off these

It is important to highlight that it is difficult to draw a clear boundary between core and peripheral activities, since, as we have seen, outsourcing has progressively affected activities traditionally considered as core for production companies, such as research and development.

loopholes and this has favoured an increase of segmentation.

6.1. Employees' representatives between inclusion and exclusion

Through the case-studies we have presented in the previous chapters, this research has tried to disentangle how employees' representatives have dealt with processes of vertical disintegration. We now present a comparative account of the strategies adopted in the two sectors. From our case studies, a differentiated picture of inclusion and exclusion emerges. This is true both with regard to the two industries and to the different "peripheral" workforce groups we have analysed. For the sake of clarity, we have grouped the responses given by employees' representatives to employers' segmentation strategies in the two industries with regard to three different workforce groups: agency workers, transferred workers and new subcontractors.

Agency workers

The most clear difference between the response of employees' representatives within the two industries has taken place with regard to agency work. Both the IG Metall and the IG BCE are progressively including agency workers within their representation realm. Indeed, they have tried to close the gap in working conditions between direct and agency workers through the definition of sectoral collective agreements which envisage pay bonuses for agency workers assigned to metal and chemical companies.

However, both the process leading to these agreements and the situation at plant level strongly differ in the two sectors. In the metal sector, the negotiation of a sectoral collective agreement on pay bonuses was the final result of a more encompassing strategy. Indeed, since 2007 the IG Metall has engaged in a very confrontative media campaign, aimed at raising public attention to the issue of agency work and at thematising the injustice involved in the poor working conditions these workers are exposed to. Moreover, the campaign aimed at

sensitising works councils and at pushing them to include agency workers, enlarging their understanding of a works council's representation realm beyond the boundary of workers directly employed by a company. Furthermore, they were pushed by the union to engage in the regulation of agency work at plant level through the definition of plant-level agreements which aimed at improving the employment conditions of agency workers and at progressively closing up the pay gap between core and agency workers. Instead, the chemical union never adopted such strategy and the definition of the sectoral collective agreement was a (albeit very important) unique moment.

Thus, differences in the strategic approaches of employees' representatives in the two industries were clearly visible at plant-level. Indeed, agency workers in chemical companies were substantially excluded from works council's representation. Chemical works councils' rarely got in contact with agency workers and did not try to represent their interests. In some cases, such as maintenance companies as Tectrion and Bilfinger Maintenance Sued, agency work was explicitly used as a buffer which allowed the company "to breath" and manage production peaks without endangering job security of the core workforce (Interview Adam). In these cases, agency work represent a significant share of the workforce (in both cases far above 10%). Moreover, in none of the analysed chemical companies (with the sole exception of Clariant) the works councils have bargained plant-level agreements on agency work. According to our interviews, this situation is rather common in chemical companies in Germany and reflects the scarce attention given by chemical works councils to the issue.

On the contrary, agency workers in the analysed metal plants were much more integrated and works councils considered themselves as the representatives also of this workforce group. Moreover, in all cases, works councils have negotiated specific plant-level agreements setting pay levels, quotas, and transition patterns.

This differentiated pattern of inclusion has very material consequences for agency workers⁶⁹. Indeed, as we can see from table 9 below, wage levels for agency

Pay levels of agency workers strongly vary according to their place of assignment. Agencies belonging to the two employers' associations BAP and IGZ apply the sectoral collective agreement negoatiated with the DGB special bargaining group for the agency sector. However, as we have seen, agency workers in metal and chemical companies are also entitled the pay bonuses negotiated by the IG Metall and the IG BCE with the same employers' associations.

workers are much lower in the analysed chemical plants in comparison to metal ones. Indeed, while both the chemical and the metal unions have negotiated similar pay bonuses for agency workers at sectoral level, works councils in several metal companies have further improved wages for agency workers. As we have seen in the previous chapter, for example, works councils at Audi, Daimler and ZF have negotiated much higher minimum wages for agency workers assigned to their companies than those set at sectoral level. In these cases, pay levels for agency workers usually come close to equal pay, even if, as we have already highlighted, agency workers are not entitled to all the bonuses system direct workers profit from. Thus, negotiations at plant-level (and, thus, the orientation of the works council in this regard) make a significant difference for the economic situation of agency workers.

Table 9. Pay levels of agency workers (according to their place of assignment)

Assignment place	Source of regulation	Pay level (minimum- maximum)
Agency sector	DGB collective agreement with BAP(1) and IGZ(1)	€8.50 - €18.89
All analysed chemical companies	IGBCE collective agreement with BAP(1) and IGZ(1) (agreement on additional benefits)	€9.78(2) – €18.89
Metal companies (with no plant-level regulation)	IG Metall collective agreement with BAP(1) and IGZ(1) (agreement on additional benefits)	€9.78(2) - €28.34(3)
Audi	Plant-level agreement	Minimum €16.30
Daimler	Plant-level agreement	Minimum around €18
ZF	Plant-level agreement	€13.02 – €28.50

⁽¹⁾ Employers associations of the agency sector

Source: Interviews, Jungvogel 2013, Schumann 2013.

Several observations have to be introduced here. First, as we have already stressed, agency work is a more marginal phenomena in the chemical industry than in metal one. Indeed, in most our cases, agency workers were just a handful. This might be an explanation for a reduced activism on behalf of works councils with regard to

⁽²⁾ Lower wage-group after 6 weeks of continuous assignment

⁽³⁾ Higher wage group after 9 months of continuous assigment

Lastly, in several companies, works councils have negotiated plant-level agreements further improving wages for agency workers. Thus, depending from the activism of sectoral or plant-level representatives, agency workers enjoy significantly different employment terms.

this issue. Still, it does not seem a particularly convincing one. First, even in those few cases in which agency workers have a high incidence on the workforce (such as the two maintenance companies, Bilfinger Maintenance Sued and Tectrion), works councils did not bargain plant-level agreements, but limited themselves to control the assignment of agency workers and the fact fact that they were applied pay bonuses (and, thus, that agencies were part of the employers' associations). Secondly, one could argue that, exactly for the fact that agency work does not constitute a significant flexibility or cost-saving opportunity for employers, workers' representatives should have little to lose in regulating the issue and, thus, have more incentives and less obstacles in doing that. However, this was not the case. Thus, we can argue that the regulation of agency work and the reduction of segmentation does not seem a priority for works councils in the chemical industry. Secondly, we have to stress that, as we will see more clearly further on, our cases in the automotive industry are not representative of the orientation of automotive works councils as a whole. Indeed, our interviewee often represented their companies as forerunners and best-practices within the industry (Interview 15, Salerno). Indeed, segmentalist strategies were identified by other studies also in metal and automotive companies (Artus and Rossmeissel 2012, Benassi 2013, Pulignano and Doerflinger 2013). Lastly, even within analysed automotive companies, the defence of agency workers was always at risk of being subordinated to the protection of the core workforce, which surely remains the first point of reference for works councils. An example of this, is the way in which the Daimler's works council has dealt with the issue of agency work during and immediately after the crisis, when agency work was substantially considered a buffer for avoiding dismissals among core workers. However, we can still say that in the metal sector, agency work has (at least partially) been integrated into works councils' representation domain, while it has been much less so in the chemical industry.

The defence of internal workers exposed to outsourcing

In both our industry case-studies, employees representatives have shown a strong interest in defending internal workers exposed to outsourced threats and in both

cases this goal has gone hand in hand with the acceptance of concessions on their terms and conditions of employment.

As we have seen in the chapter devoted to the chemical industry, the maintenance of the integrity of the union's representation domain during processes of vertical disintegration has been the key objective of the IG BCE and of the chemical works councils. Indeed, employees' representatives have ensured that all newly grounded companies remained within the responsibility domain of the chemical industry and did not shift to other collective agreements. For doing so, employees' representatives have accepted the use of flexibilisation instruments entailed within the chemical collective agreement (such as opening clauses and specific plant-level collective agreements). Thereby, they have accepted the segmentation of working conditions among different workforce groups and different companies. Still, they have avoided those companies to fall within the representation realm of other unions and, potentially, a much stronger deterioration and differentiation of their employment conditions. By setting higher standards than those set in other collective agreements (even if lower than the chemical one), these instruments aimed at reducing an even stronger polarisation of working conditions in service and production companies.

In the metal case, employees' representatives have adopted similar instruments in order to prevent the externalisation of auxiliary functions. Indeed, both at Audi and at Daimler, works councils (with the support and the active engagement of the local IG Metall) have accepted to negotiate measures aiming at reducing the costs of the internal provision of these services in order to block their outsourcing. Thereby, employees' representatives have bargained lower terms and conditions of employment in order to block outsourcing. Again, the acceptance of segmentation was geared towards avoiding greater segmentation to take place through vertical disintegration.

Still, as we have highlighted, within the metal industry this strategy has been strongly contested and it has never been embraced at national level. This may signal the presence of an ideological opposition to such forms of segmentation. However, in some cases (such as at Daimler plant in Untertuerkheim), opposition to service sector contracts had the consequence that the company relied on other

instruments (namely outsourcing without the transfer of employees) in order to achieve their goals of cost cutting. Thus, if not accompanied with an active engagement of employees' representatives on the issue of external employment, such ideological opposition to segmentation had the paradoxical consequence of letting workers performing those functions even worse off.

An important difference between the two cases is that, in metal plants, service sector collective agreements aimed at avoiding outsourcing, while at chemical ones outsourcing was never blocked. This is important for one main reason: the separation of service activities from production companies opens up the possibility to circumvent regulation though outsourcing, since these companies compete with external providers for getting contracts from production companies. This has two consequences, which have the potential to undermine the IG BCE strategy. First, subcontractors not covered by the chemical agreement can enter the park, thus questioning its collective bargaining unity (which, as we have seen, was a goal of the union). Second, since subcontractors available to chemical companies do not apply homogeneous standards to their workforces, service companies applying chemical collective agreements are pushed into spirals of continuous concessions in order to be competitive against companies which apply cheaper collective agreements. Thus, the reduction of working conditions might be a never ending process.

Another major difference between the two sectors lies in the social dynamics on which such negotiations were based and, particularly, on the role of employers. Within the chemical industry, indeed, employers manifested an interest in keeping the collective bargaining unity within chemical parks for avoiding the risk of conflict deriving from the entrance of other (more militant) unions. Thus, they gave preference to the use of flexibilisation instruments over a complete outsourcing, even if more costly, in order to keep peaceful labour relations within the parks.

On the contrary, within the metal industry, the definition of service sector collective agreements took place only in companies with strong and politically conscious works councils (Duennemeier 2008, Interview 27, Interview 17). Where works councils were not strong enough or were politically weak, employers simply resorted to outsourcing. As argued by an interviewee,

in those cases, where we were politically strong, we have regulated the issue through the works councils. And this is for me crucial: were we were strong enough, we have regulated this issue, and where we were not strong enough, it has developed. Namely, that employers have simply outsourced (Interview 27).

This was very clear in the case of Audi. There, the definition of a service sector collective agreement required the works council to mobilise the workforce and to exercise conflict. Thus, service sector collective agreements can be interpreted as ways to reduce segmentation.

New subcontractors

Lastly, we have reviewed initiatives geared towards new subcontractors (i.e. those subcontractors have not developed from the transfer of workers from production companies). As we have seen, these groups of employees have been generally out of the sight of employees' representatives. Indeed, at our analysed plants, up until few years ago there were almost no plant-level agreements dealing with the issue of external employment through subcontractors. The sole examples of regulation concerned the effects outsourcing processes had on internal employees. For example, when discussions on the outsourcing of maintenance activities took place at ZF, the company's works council clearly identified those realms where outsourcing could take place (i.e. in easier maintenance activities, such as facility management) and those where it could not (i.e. maintenance activities within the production process). Even when the company foresaw structures for dealing with "make or buy" decisions, outsourcing was often considered problematic only if it affected employment levels within the companies. Since this was often not the case, works councils mostly remained inactive. Indeed, as argued by an interviewee

It has not been so, that core workers have been kicked out or have been sent to subcontracting companies. In our industry, especially in co-determined companies where there is a works council, it is a more creeping process. People retire or exit the company for other reasons, and the position is not re-occupied by internal employees, (...) but is given to external companies (Interview Iwanowski).

In such situations, employees' representatives have, thus, often not acted and external subcontractors have remained outside the representation realm of the two

unions.

Still, as we have seen in the previous chapter, things are currently changing in the metal industry. The IG Metall has started a campaign on subcontractors which aims both at regulating working conditions at subcontractors of metal companies. This should take place in two ways. On the one hand, subcontractors are to be organised within the IG Metall and representation structures have to be constructed in order for employees to express their voice. On the other, works councils of metal companies have to strengthen their control over outsourcing decisions, by bargaining collective agreement extending their influence capacity and setting better working conditions for people working at subcontractors. This new initiative entails an enlargement of the representation realm of the union and of metal works council. Indeed, this campaign is based on a value chain approach according to which workers employed within the metal value chain have to be represented by the IG Metall.

Summing up, it is interesting to note that our cases show some recurrent patterns with regard to the inclusion or exclusion of different peripheral groups. In both industries, vertical disintegration has been mostly dealt with when it implied (or threatened) the transfer of internal workers. In these cases, employees' representatives have tried to protect workers involved not only in the form of transition agreements (as identified in the first chapter), but also with regard to the coverage of new plants or the identification of instruments for avoiding the transfer. Even if, as we know from the literature, this can not be taken for granted (often employees' representatives have solely ensured working conditions for transferred employees and not for transferred "functions", Caprile 2000), this can be considered the form of vertical disintegration which requires less adaptation with regard to a union's boundary setting, because it concerns workers which have already been part of the union. This might be explanation for the more inclusive attitude shown by employees' representatives in both cases.

Including agency workers and external subcontractors, instead, required a process of boundary enlargement. Indeed, these two groups were "outside" unions' traditional representation realm (they were "the others" as often argued by our

interviewees). As we have seen, this inclusion has taken place in differentiated ways in the two industries. The chemical union (and most of all chemical works councils) are still treating agency workers and external subcontractors as outsiders. Instead, the metal union and the metal works councils have progressively enlarged their representation boundaries, even if the inclusion of agency workers has proved to be easier that that of new subcontrators. This might be due to the fact that agency workers are usually closer than subcontractors, since they are involved into the company's labour process. Thus, they might be more easily recognised as metalworkers and, thus, more easily includes.

Even if the two cases show some common patterns, thus, we can argue that the metal union is displaying a more inclusive strategy towards peripheral employees. The IG Metall has progressively engaged with the issue of agency work and is now turning to the organisation of subcontractors. The chemical union, instead, has mostly looked at those segments of chemical companies which have been outsourced and limited itself to protect those workers' employment conditions. In both cases, however, a progressive redefinition of representation boundaries has taken place.

6.2. How can we interpret trade unions' and works councils' strategies?

It is important, now, to look at in how far the hypothesis we have presented in the first chapter are able to account for these differences. As we have stressed, three are the factors which might influence trade unions' and works councils' behaviour towards peripheral employees: ideological orientation, members' interests (expressed in this case as the presence or absence of competition between core and peripheral employees), and organisational interests. From our cases, a complex interplay between ideological motivations and material and organisational interests seems to emerge.

6.2.1. The metal case: organising peripheral employees for avoiding competition

As we have already argued, we can highlight a turning point with regard to how employees' representatives in the metal sector have dealt with the issue of peripheral employment. As we have seen, indeed, up until few years ago, this issue was mostly left at the plant level. Here a great deal of variance was visible 70. In some cases, agency work was considered a buffer for core workers. Hence, works councils did not engage with the issue or bargained very loose quota, which allowed a great deal of flexibility to employers (Benassi 2013, Pulignano and Doerflinger 2013, Wassermann and Rudolph 2007). In other cases, instead, agency work was regulated, and equal pay provisions and quota were introduced in order to reduce segmentation with regard to core workers, and limit employers' use of the instrument. According to our interviewees, this depended from the political commitment of works councils and its closeness to the union (Interview 27, Interview 28, Interview 15, Interview 17). Indeed, for more politically conscious employees' representatives (i.e. those which were more committed to ideals of equality and working class solidarity and were considered IG Metall's strongholds), segmentation has never been acceptable. These works councils have attempted to milder negative effects of employers' segmentation strategies by regulating the deployment of agency work at plant level and opposing to outsourcing. Our casestudies are examples of this stance: both at Audi and at Daimler agency work was regulated very early (even before the Hartz reforms favoured its boom) and, most of all, the equal pay principle was introduced right at the beginning.

This differentiated approach at plant-level suggests two observations. First, it has not been the ideology of the metalworkers' union per se to prevent the adoption of segmentalist strategies, but rather the political commitment of plant-level actors to ideals of equality and their closeness to the union. Indeed, a sectoral tradition of working class orientation has not been sufficient to prevent employees' representatives to adopt exclusive strategies when the material interests of their

Our case studies comprise only metal companies where works councils actively engaged with the issue of agency work in a very early phase (Audi and Daimler) or where it did not play a significant role until very recently (ZF). However, we have been able to rely on other studies (Artus and Rossmeissel 2012, Benassi 2013, Promberger 2012, Pulignano and Doerflinger 2013, Weinkopf and Vanselow 2007) in order to develop the following observations.

members were at stake. However, these ideals were not overall abandoned, as our cases show, and they are still important in defining works councils approaches in some cases.

Second, the working-class orientation traditionally embodied by the IG Metall is not able to account for the changing behaviour shown by the union over time. As we have seen, up until the late 2000s, the IG Metall left the regulation of both agency work and subcontracting at plant level and did not question (or politically sanctioned) those cases in which works councils adopted segmentalist strategies. In more recent years, instead, the union has adopted a more activist approach with the aim of influencing works councils activities and re-gain control over the issue. Thus, ideology does not explain the current change of strategy taking place at national level and we need an alternative explanation.

What emerges from the sectoral case-study is that the whole rhetoric surrounding the two recent IG Metall campaigns is based on two issues: first, the pressure posed by peripheral employees on core workers; second, the threat posed to the union and its collective bargaining capacity. Indeed, since the mid 2000s, the IG Metall started portraying the spread of agency work and of subcontracting agreements as a strategy for weakening both the union's collective agreements and core workers' standards. External employment has been described as an instrument for circumventing regulation, dismissal protection and collectively bargained standards and, thus, the capacity of the union to set employment conditions within the industry (IG Metall 2012). Moreover, these instruments have been portrayed as detrimental for core workers, because they function as benchmarks over which core workers' performance is evaluated. This often has a disciplining effect. The latter point is clearly exemplified by the quote below taken from an interview with the trade union official responsible for the national campaign on subcontracting.

There are very nice management methods, in which production results and cost factors are displayed on a blackboard and then all core workers can see every day what was produced by external employees and at which cost, and what they have produced and at which cost. This has a strong disciplining effect. And therefore in such companies will be surely more difficult, when you enter a negotiation for the collective agreement and you come to the question "would we like a wage increase: yes or no?", then employees will worry about that and say "yes, a wage increase would be good, but what I do, they do it for much less, than I rather remain quite" (Interview Iwanowski).

The disciplining mechanism, thus, runs through the following idea which is

conveyed to core workers: "YOU should be grateful for what YOU still have" (Iwanowski 2008: 6). It is important to highlight that, within the IG Metall's rhetoric, members' interests and the interests of the union overlap. Indeed, for example, the disciplining mechanisms described above also weakens the IG Metall's capacity to act, since workers are considered less likely to strike.

Another crucial point is that core/periphery competition and the pressure it produces do not arise from a simple quantitative increase in the number of peripheral employees, but more from the perception of what employers want to achieve with this personnel strategy. Indeed, if we compare the relationship between core and peripheral workers in the two sectors we note that in those chemical companies where agency work has a strong numerical incidence on the workforce (such as the two maintenance companies, Bilfinger Maintenance Sued and Tectrion), works councils do not perceive agency work as threat, but instead as an instrument that protects the core workforce (Interview Adam). Thus, the role of employers in this regard is fundamental. According to the IG Metall, employers are strategically relying on external employment in order to circumvent regulation and to weaken the core workforce (Interview 28, Interview 27). As argued by an interviewee.

there are industrial companies (...) that strategically decide to hire subcontractors. And their goals are often to limit the power of works councils and to reduce their codetermination possibilities, to reduce wages and increase working times, and to exclude those workers from plant-level agreements (Interview 28).

This observation is important for understanding the strategic orientation of the union. Indeed, the idea of a cross-class coalition between employers and core workers at the expense of peripheral ones (as the one hypothesised by the dualisation literature) is viable only if the latter are used as a buffer. If, instead employers are considered to make use of these instruments for weakening core workers and the union, an alliance with employers is not a viable option. Thus, instead of triggering a closure of employees' representatives and a strengthening of cooperation with employers aiming at protecting the internal labour market (as suggested by the dualisation literature, but also by older accounts on the effects of the crisis over corporatist interest representation in Germany, Streeck 1984), these conditions triggered the union to underlie the common interests between core and

peripheral employees and to highlight that the defence of core workers requires to close off loopholes by regulating the external labour market. Inclusion can then be considered as an attempt to defend the interests of core members and of the union itself (see Benassi and Dorigatti in progress).

Two points have, however, to be raised with regard to the issue of competition. These come from the fact that, in our cases, we did not find evidence for arguing that recent inclusive attitudes with regard to subcontractors derive from the presence of competition between core and peripheral workers. Indeed, within the analysed plants an *actual* competition (such as the one experienced by several service providers in chemical parks) between the core workforce and external subcontractors was not highlighted by our interviewees. What they stressed is a sense of "precariousness" arising among core workers by a difficult external labour market (Interview 16). However, in all three cases, this seems not to be the trigger of the new campaigns. Engagement with subcontracting, as well as with agency work at ZF, came not so much from internal problems, but from the strong commitment of plant-level representatives to the union's political line. Indeed, works councillors at Audi, Daimler and ZF are strongly involved into IG Metall activities (i.e. their engagement was triggered from the outside). With this regard, two hypothesis can be formulated.

First, competition may not be present in these companies but it is actually taking place in others. This may be plausible because several interviewees have highlighted the difference of their companies with respect to other metal plants. Indeed, these companies' high organisation levels and the strength of their works councils insulates the internal from the external labour market and reduces the pressure arising from segmentation (Interview 16, Interview 17, Interview 15).

The second hypothesis is that competition is still not perceived as a problem by plant-level actors and is mostly a concern of the union, which, on the one hand, is fearing competition might arise and, on the other, is fearing for the union itself. The salience of this issue within the IG Metall's rhetoric may, thus, lie in the necessity for the union to persuade works councils of the utility of these campaigns and of the fact that they are, at the end, in the interests of their members. Indeed, both the campaign on agency work and the one on subcontracting had a strong top-down

character, since they were initiated and pushed by the national level. Moreover, the union had to work a lot on works councils in order to win them for the campaigns. The necessity to persuade works councils was underlined both in IG Metall's publications and by our interviewees.

At the beginning this was an issue with agency work. Agency workers were "the others". And there were several companies, several workforces, that, under the continuous fire by employers, have also argued "Yes, we need agency work to be flexible". And in the end quasi for having thereby their peace. However, through the campaign we have been able to make it very clear, that there can be no peace, if you have here a workforce that earns very well and nearby another one which earns the half. (...) We had to work very hard in several companies in order to convince and to make clear that all workers sit in the same boat. We have succeeded in several companies. Surely there are always some that say, "at our company it is eventually very good, that we have this buffer". I think we will have the same debate, perhaps even a little more difficult, with the issue of subcontracting. But, again, we already have some exercise in that, to enlarge the sight and to see not only the core workforce, but also the peripheral one and to recognise that the two have a common interest. And that one jumps far too short if he simply says "we have to keep some cheaper workers or more flexible workers, so that nothing happens to us". Because at the end, this is evidently false. But we are working on that (Interview 28).

At the beginning of the campaign it is important to sensitise works councils and union representatives on the issue of subcontracting. As a first step it is important to raise attention among works councillors: "look who enters your company! Ask questions to the management: who works here? What is given outside?" (IG Metall 2012: 9).

The centrality of competition and of members' interests (albeit differently framed) in the union's discourse, thus, may be a reflection of its necessity to speak in a way that motivates all works councils to act.

6.2.2. The chemical case: exclusive solidarity

As we have seen in the third chapter, the chemical union and the works councils responded to employers' segmentation strategies according to the traditional system of the chemical partnership: they accepted employers' restructuring measures (even if sometimes with doubts on their economic viability) and attempted to reduce negative consequences for all chemical workers by ensuring that they remained within the representation realm of the chemical union.

Here, again, we see the role of inherited traditions in shaping the response given by employees' representatives. This took place in two different veins. On the one hand, a common identity as chemical workers was at the base of the union's and the

works councils' semi-inclusive attitude in that it ensured not only that transferred workers kept their individual rights, but that all plants deriving from the dissolution of former chemical conglomerates remained part of the industry. Indeed, service sector workers and service companies coming out from chemical companies were recognised as belonging to the chemical industry and as sharing the same chemical identity as production companies. Thus, it was a primary union goal to keep these segments within the chemical union's representation domain and ensure that chemical parks remained an IG BCE monopoly.

On the contrary, however, the strong reference to the chemical industry produced that external subcontractors as well as agency workers were perceived as outsiders. Thus, they did not enter the union's and the works councils' domain. It is not that employees' representatives did not show any concern with regard to how those workers were paid and to the fact that they were subject to much worse working conditions, but they remained outside the responsibility domain of plant-level employees representatives and their representation was not considered a duty of employees' representatives.

Hence, employees' representatives actually redefined the boundaries of their representation realm, moving from the representation of chemical industry to include also services provided to the chemical industry, but only in so far as the new areas of inclusion were actually already represented by the union as deriving from the outsourcing of specific functions. Thus, chemical parks are in the paradoxical situation where you have service subcontractors of the chemical industry doing the same activities but belonging to different unions (and in some cases having no union representation at all). As we have seen, this is producing significant problems for workers and employees' representatives in service companies covered by a chemical collective agreement, but this is at the moment not triggering any new initiative. Instead, competition with cheaper external providers is dealt with through a social partnership approach, by ensuring workers' contribution to the company's competitiveness via derogations.

The sole cases in which employees representatives expressed their interest in regulating the issue of agency work and subcontracting were those cases in which these employment forms were producing negative effects for the core workers. As

we have seen, an example of that was Aliseca, Lanxess subsidiary for maintenance services, where agency work is a significant component of the workforce. Here, agency work is considered by the works council as potentially substituting stable jobs positions. Thus, the works council is asking for regulation. Still, according to the information newspaper published by Lanxess' works council in Leverkusen, the envisaged platform mostly focus on the limitation of the use of agency work (to be restricted to the coverage of transitory personnel shortages). Even if the requests of the works council include also some elements which should close the distance between core and agency workers (such as the participation to training and same access to social spaces), they do not include equal pay or any wage improvement above the sectoral pay bonuses (Der Betriebsrat 2013: 11).

However, in most of the plants agency workers and subcontractors are not considered as problematic aspects for the core workforce and, thus, are in no need of regulation. Indeed, they mostly represent marginal phenomena, clearly separated from the activities performed by chemical workers. As we have highlighted, the only overlapping takes place with regard to service companies belonging to the chemical sector. However, employees' representatives in production plants do not see as part of their duties, of their responsibilities and of their possibilities to solve this issue, even if they clearly consider it as problematic. On the contrary, those service companies, even if still organised by the chemical union, seem to occupy a subordinate position in the definition of the union's strategic agenda. Even in those cases in which peripheral employment is quantitatively more significant, such as in maintenance companies, it is not considered as an instrument to weaken core workers and their collective representation. Thus, it is accepted as a way to protect core workers. Here, we need to point to a last element evidenced by our casestudies, i.e. the fact that the specific sectoral identity also influenced employers' use of segmentation strategies. As we have seen, indeed, chemical employers have been disposed to avoid pursuing more extreme segmentation strategies in order to safeguard the presence of the IG BCE as the sole representative of the park's workforce. This, even if to adopt this stance required to pay an economic price, since employment conditions set by the chemical collective agreement and other collective agreements signed by the chemical union are much higher than those of other industries. This is recognised also by employees representatives, which relate the fact that chemical parks have maintained their collective bargaining unity even after massive vertical disintegration processes not only to their own action and strength, but also to employers' willingness (Interview 1, 2, 10, 12). Ideals of social partnership which have characterised the sector since the 1970s, thus, are still alive and continue to characterise actors' strategies. This is rather different than in the metal industry, where, perhaps even too emphatically, the at the time of the statement vice-secretary of the union, Detlef Wetzel, argued that "the social consensus of the old Federal Republic has been broken. The capital side is questioning once valued mechanisms to find compromises. The base of social partnership has become more and more fragile (Wetzel et al. 2008: 3)".

6.3. Conclusions

The comparison between the metal and the chemical case has given us important insights with regard to the factors explaining trade unions' behaviours in cases of labour market segmentation. We have seen that both identity legacies, material interests and organisational interests are important for explaining the strategies adopted by employees' representatives towards peripheral employees and that they cannot be analysed without looking at employers' behaviour. Indeed, ideals of equality have been important in explaining the inclusive attitude adopted by some metal works councils towards peripheral employees and especially towards agency workers. Such motivations play a much weaker role in the chemical sector, implying that the stronger working-class orientation historically displayed by the metalworkers' union is a significant factor. In the chemical industry another type of identity played a role, namely the sectoral, social-partnership identity. This, indeed, ensured that employees' representatives maintained a commitment to keep all outsourced services under their representation domain and that employers avoided restructuring measures that would have produced the entrance of other unions into the park.

Still, we have seen that identity commitments have to be balanced against material and organisational interests and, in some cases, have actually been overturn when pressures over employees' representatives became stronger and plant-level representatives were not politically strong enough. In some cases, also within the metal sector, the imperative of protecting the core workforce has trespassed equality preoccupations and favoured the adoption of segmentalist strategies. Thus, even if important, employees' representatives commitment to equality does not explain alone their behaviour towards peripheral employees.

The relationship between the core and the periphery seems to be another key element for explaining the two unions' strategies and particularly IG Metall's trajectory. Indeed, while in the past the union let the regulation of this issue at plant-level and even accepted works council's exclusive approaches, the increased pressure exercised by peripheral employment on core workers is pushing the union to strengthen its activities and to develop campaign concepts aimed at regulating the periphery of the labour market. On the contrary, the fact that the core/periphery structure within the chemical sector does not question working conditions of chemical employees favours the neglection of this issue by their representatives. Thus, core workers' material interests are crucial in understanding employees' representatives strategies. However, they do not always trigger exclusive strategies and labour-management coalitions, but may also trigger the inclusion of peripheral groups into trade union's agenda.

Conclusions

This dissertation has been moved by the interest in exploring the role of trade unions (and employees' representatives more generally) in increasingly segmented labour markets. As we have already stressed, over the last years, a debate has developed between two different approaches to the issue. On the one hand, there are scholars who have represented trade unions (especially in continental political economies) as the defenders of the better off among workers and have considered them increasingly unable (and even unwilling) to give adequate protection to the weakest segments of the working class (Palier and Thelen 2010, Hassel 2014). On the other hand, we find accounts arguing that segmentation and increased inequalities among insiders and outsiders are primary the result of employers' strategies and the sole responsibility of labour is to be too weak to oppose them (Korpi 2006).

What our research project has shown is that both approaches are inadequate for explaining the behaviour of employees' representatives in segmented labour markets and the reasons guiding this behaviour.

Contrary to what commonly argued by the power resource theory, as we have seen, it is not enough that trade unions are strong in order for them to limit segmentation. Indeed, this effect is strongly dependent on the willingness of employees representatives to act in an inclusive way towards peripheral employees. Even if all our cases concerned companies where works councils and trade unions have still a relatively stable power position, not all of them have acted in order to milder negative effects of vertical disintegration: While in some cases employees representatives were able to significantly improve working conditions for peripheral employees, in other they have not used their power. Thus, our case studies confirm the fact that, under difficult economic conditions and faced by more aggressive employers' requests, employees and their representatives might adopt exclusive orientations and attempt to "save" themselves even at the expense

of other workers. Underlying the fact that core workers' representatives may have an ambiguous position towards segmentation is a very significant contribution given by the dualisation to theories of industrial relations and of trade union behaviour, something which was neglected in previous power resource approaches. Thereby, indeed, the dualisation literature has pointed out some of the most significant risks the labour movement if facing and the difficulty to practice solidarity in the current economic, social and political situation.

However, our research has also confirmed our starting argument according to which the dualisation literature has developed a too mechanistic relationship between union action and its members' interests. This for two broad reasons. First, this literature completely overrides other possible motives for explaining the action of employees' representatives, such as identity legacies or organisational interests. As we have seen, instead, identity has been an important, even if not alldetermining, element for explaining the behaviour of employees' representatives at plant-level. Indeed, the political commitment to equality has been the driver of inclusive strategies by some works councils in the metal sector, while this preoccupation seems to be much less relevant for employees' representatives in the chemical one. Surely, we have shown that the stronger working class ideology of employees' representatives in the metal sector did not impede that several works councils adopted segmentalist strategies, nor triggered an active intervention (with the consequent deployment of resources) on behalf of the union. Still, we have observed a difference at workplace level between politically stronger and more conscious works councils and weaker ones and this made us argue that the political orientation of employees' representatives still plays a role in their behaviour.

A second limitation of the dualisation literature is that it portrays the interests of core and peripheral workers as always being opposed. According to this approach, indeed, core workers have an interest in allying with employers, consenting to their segmentation demands, and to exclude peripheral employees. We argue that this is based on a fault reading of current labour market dynamics, one that considers core and peripheral labour markets as clearly separated and disconnected. Moreover, it seems based on the idea that employers in core sectors of Coordinated Market Economies are always sustaining coordination with labour for reasons of economic

efficiency. However, we have seen in our cases that both these premises are questionable. Indeed, within the metal sectors, the new strategic orientation developed by the union with regard both to agency work and subcontractors is based on the perception of a growing competition taking place between core and peripheral workers and to the fact that employers are intentionally using this competition to question established standards for the core workforce. Thus, under certain conditions, the interests of core and peripheral workers may overlap and push core workers' representatives towards the inclusion of the latter (see Benassi and Dorigatti in progress). However, we have also shown that the extent to which this happens strongly varies across sectors. Indeed, while in the metal sectors employers have adopted more aggressive segmentation strategies, which have increasingly been perceived by the IG Metall as attacks against its position, employers' strategies in the chemical sectors are not considered as directed towards the goal of weakening the union and the works councils' position. As we have seen, this widely explains the different orientations presented by the two unions with regard to peripheral employment.

This observation has two broader implications for the literature.

First, it questions the idea that the core labour market is insulated from the peripheral and that core workers are unaffected (or even benefit) from peripheral employment. What our research clearly shows is that core and peripheral labour markets may indeed interact and permanent workers be exposed to pressures by the external one. Thus, we need different and more complex account of the dynamics between core and peripheral labour markets. A promising direction for further research is, thus, the identification of the factors shaping different relationships between core and peripheral labour markets in different sectors. As we have seen, for example, the pure numerical incidence of peripheral employment does not necessarily produce negative effects on core workers. Indeed, within the chemical sector, the significant incidence of agency work in some companies was not perceived as a threat by employees representatives. An important factor which might shape this relationship are employers' strategies and their motivations for relying on peripheral employment. Further research should, thus, investigate the political dimension of labour market segmentation and highlight how actors'

strategies constantly redefine core/periphery configurations.

Secondly, but consequential, there is a need to recast theories looking at employers' behaviour and their willingness to sustain coordination with labour. As we have already stressed in the introduction, theories referring to the Varieties of Capitalism approach have argued that employers' in core sectors of Coordinated Market Economies are willing to sustain coordination with labour for reasons of economic efficiency, such as the goal of sustaining workers' commitment and their investment in skills (Hall and Soskice 2001). However, our two case studies show that employers in Germany are doing that in different extents. Thus, further research should analyse the determinants of employers' behaviour, looking at which social, economic and political factors influence their behaviour.

Interview list

Site	Interview number	Company	Position	Date
Industriepark Hoechst	Interview 1	InfraServ Hoechst	Chair of the works council	19/10/12 23/05/13
	Interview 2	Sanofi	Chair of the works council	19/10/12
	Interview 3	InfraServ Logistics	Chair of the works council	22/05/13
	Interview 4	InfraServ Logistics	Works councillor	22/05/13
	Interview 5	Bilfinger Maintenance Sued	Chair of the works council	23/05/13
	Interview 6	Bayer Crop Science	HR and site coordinator	27/09/13
	Interview 7	Bayer Crop Science	Works councillor	23/09/13
	Interview 8	Clariant	Deputy chair of the works council	23/09/13
	Interview 9	IG BCE Hessen- Thüringen	Chair of the local union (Hessen-Thüringen)	12/07/13
Chempark Krefeld-	Interview 10	Currenta	Chair of the works council	29/10/12 26/05/13
Uerdingen	Interview 11	Currenta	Management	26/05/13
	Interview 12	Bayer Material Science	Chair of the works council	12/09/12 27/09/13
IG BCE	Interview 13	IG BCE Hannover	Industrial policies department	12/07/13
Audi	Interview 14	Audi	Works councillor	05/11/13
	Interview 15	IG Metall Ingolstadt	Chair of the local union (Ingolstadt)	10/10/13
	Interview 16	IG Metall Ingolstadt	Responsible campaign GVZ Ingolstadt	06/11/13
Daimler	Interview 17	IG Metall Bade- Wuerttemberg	Deputy chairman local union (Baden-Wuerttemberg)	23/07/13
	Interview 18	IG Metall Bade- Wuerttemberg	Responsible campaign industrial services	27/11/13
	Interview 19	Daimler Sindelfingen	Head of the workplace union representative body	08/10/13
	Interview 20	Daimler Bremen	Works councillor	31/07/13
ZF Friedrichshafen	Interview 21	ZF Friedrichshafen	Works councillor	18/04/13 14/06/13
	Interview 22	IG Metall	Assistant of the works council	14/06/13

	Interview 23	ZF Friedrichshafen	Manager (Head of the purchasing department)	14/06/13
Schnellecke	Interview 24	IG Metall	Official (in charge of Schnellecke)	13/05/13
	Interview 25	Schnellecke Sachsen	Chair of the works council	13/05/13
IG Metall	Interview 26	IG Metall	Official (in charge of the industrial services campaign)	26/01/12
	Interview 27	IG Metall (headquarters)	Official (responsible for industrial services)	15/09/12
	Interview 28	IG Metall (headquarters)	Head of the campaign department	15/09/12
	Interview 29	IG Metall Eisenach	Head of the local	03/07/13
Gesamtmetall	Interview 30	Gesamtmetall	Member of the executive board (education and national economy)	20/03/13

Reference list

- Ackroyd, S. and Procter, S. (1998). British manufacturing organisation and workplace relations: some attributes of the new flexible firm. *British Journal of Industrial Relations*. 36(2): 163-183.
- Addison, J., Schnabel, C. and Wagner, J. (2007). The (Parlous) State of German Unions. *Journal of Labor Research* 28 (1): 3-18.
- Adecco (2007). Collective agreement between Adecco and IG Metall on the payment of wages for the workers employed by AUDI AG in Ingolstadt. 21/08/2007 Retrieved 14/02/2014 from http://www.igmetall-bayern.de/uploads/media/070831TARIFVERTRAG_Zahlung_von_Loehnen_21_08_07 Abschluss.pdf.
- AIChE (2011). Chemical Parks: Industry Landscaping à la Germany. *CEP Magazine*. 108 (10): 44-47
- Alternative (2010). Ein Schritt vor, 2 zurueck! Issue 83. 20/05/2010. Retrieved 16/02/2014 from http://www.alternative-info.org/Alternativen/2010/Nr83.pdf.
- Anderson, M. and Holmes, J. (1995). High-skill, Low-wage Manufacturing in North America: A Case Study from the Automotive Parts Industry. *Regional Studies*. 29(7): 655–671.
- Appay, B. (1998). Economic Concentration and the Externalization of Labour. *Economic and Industrial Democracy.* 19: 161-194.
- Artus, I. and Rossmeissel, F. (2012). Leiharbeit und prekaere Arbeit aktuelle Situation und Trends im Organisationsbereich der bayerischen IG Metall. Final Report.
- Atkinson, J. (1985). Flexibility, Uncertainty and Manpower Management. IMF Report n.89. Institute of Manpower Studies.
- Audi (2005). Supplementary collective agreement for industrial services at Audi. 08/04/2005. Retrieved 14/02/2014 from http://labournet.de/diskussion/gewerkschaft/differenz/dtv-audi.pdf
- Audi (2013). Basisinformationen Güterverkehrszentrum (GVZ). Retrieved 14.01.2014 from https://www.audi-mediaservices.com/publish/ms/content/de/public/hintergrundberichte/2013/03/12/basis info audi ag/das gueterverkehrszentrum.html
- Audi (2014). Verantwortungsvolles Wirtschaften. Mitbestimmung bei Audi. Retrieved 13/02/2014 from http://www.audi.de/de/brand/de/unternehmen/corporate_responsibility/wirtschaften/mitbestimmung-bei-audi.print.html
- Audi Betriebsrat (2013). Audi übernimmt 350 Leiharbeiter. Presse release. Retrieved 13/02/2014 from https://www.audi-mediaservices.com/publish/ms/content/de/public/pressemitteilungen/2013/03/20/audi_betriebsversammlung.html
- Automobilwoche (2007). IG Metall gegen weitere Ausgliederungen bei Daimler. 29/06/2007. Retrieved 16/02/2014 from http://www.automobilwoche.de/article/20070629/AGENTURMELDUNGEN/706290343/ig-metall-gegen-weitere-ausgliederungen-bei-daimler#.Uwspe4WCTYQ.

- Baccaro, L. (2008). Labour, globalization and inequality: are trade unions still redistributive? ILO Discussion paper 192.
- Baccaro, L., Hamann, K. and Turner, L. (2003b) The Politics of Labour Movement Revitalisation: The Need for a Revitalized Perspective. *European Journal of Industrial relations*. 9(1): 119-33.
- Ballarino, G. (2005). Strumenti nuovi per un lavoro vecchio. Il sindacato italiano e la rappresentanza dei lavoratori atipici. *Sociologia del lavoro*. 97: 174-190.
- Barthel, K., Böhler-Baedeker, S. et al. (2010). Die Zukunft der deutschen Automobilindustrie. Herausforderungen und Perspektiven für den Strukturwandel im Automobilsektor. *WISO Diskurs*. Bonn, Friedrich-Ebert Stiftung.
- Bayer Crop Science (2013). Business development. Retrieved 15/10/2013 from http://www.cropscience.bayer.com/en/Company/Facts-and-Figures.aspx
- Bayer Material Science (2013). Solid growth and global presence. Retrieved 18/10/2013 from http://www.materialscience.bayer.com/en/Company/Facts-and-Figures.aspx
- Becker, S., Menz, W. and Sablowski, T. (1999a). *Shareholder-Value gegen Belegschaftsinteressen. Der Weg der Hoechst AG zum "Life- Sciences"- Konzern.* Hamburg: VSA Verlag.
- Becker, S., Menz, W. and Sablowski, T. (1999b). Ins Netz gegangen: Industrielle Beziehungen im Netzwerk Konzern am Beispiel der Hoechst AG. *Industrielle Beziehungen*. 6(1): 9-34.
- Behrens, M. (2009). Still Married After All These Years? Union Organizing and the Role of Works Councils in German Industrial Relations. *Industrial and Labor Relations Review*. 62(3): 275-293.
- Behrens, M. (2012). Development of Workplace Representation in Germany". Presentation at the Second WSI Summer School "Industrial Relations and Crisis Management in Germany: a model for Europe?" 17-21 September, Berlin.
- Behrens, M. (2013). Arbeitgeberverbände auf dem Weg in den Dualismus? *WSI-Mitteilungen*. 7: 473-481.
- Behrens, M., Fichter, M. and Frege, C. (2003). Unions in Germany: Re-gaining the Initiative? *European Journal of Industrial Relations*. 9(1): 25-42.
- Behrens, M. and Kaedtler, J. (2008). Betriebliche Restrukturierung und Partizipation. Wie viel Teilhabe erlauben unterschiedliche Rationalisierungsansaetze. *Industrialle Beziehungen*. 15(1): 76-100.
- Behruzi (2010). Eigentor bei Daimler. *Junge Welt* 21.05.2010, p.5. Retrieved 31/01/2014 from https://www.jungewelt.de/loginFailed.php?ref=/2010/05-21/050.php
- Behruzi (2011). 210,000 kontra Leiharbeit. *Junge Welt* 25/02/201, p.1. Retrieved 11/02/2014 from https://www.jungewelt.de/loginFailed.php?ref=/2011/02-25/060.php
- Benassi, C. and Dorigatti, L. (in progress). Straight to the Core: the IG Metall Campaign towards Agency Workers.
- Benassi, C. and Vlandas, T. (2013). Dr. Jekyll and Mr. Hyde? Union strategies towards temporary agency workers. Paper presented at the 25th SASE Conference 27-29 June. University of Milan.
- Berger S. and Piore M. (1980). *Dualism and Discontinuity in Industrial Societies*. Cambridge/New York/London: Cambridge University Press.

- Betriebsrat Leverkusen (2013). IG BCE steht zum Werkschutz. Issue 3, March 2013: 15. Retrieved 10/02/2014 from http://leverkusen.igbce.de/download/26076-28050/2/currenta-br-informiert.pdf.
- Bilfinger (2013). Annual report 2012. Retrieved 15/10/2013 from http://www.bilfinger.com/fileadmin/corporate_webseite/investor_relations/ogb/2012/pdfs/Bilfinger_GB2012_en.pdf
- Bilfinger Industrieservice Mitte (2013). BIS Industrieservice Mitte. Die Erfolgsgeschichte. Retrieved 14/10/2013 from http://www.ism.bis.bilfinger.com/index.php?id=historie.
- Bispinck, R. (2011). Pay in the 2000s: development and outcomes. WSI Report 06/2011.
- Bispinck, R. and H. Dribbusch (2011). Collective bargaining, decentralisation and crisis management in the German metalworking industries since 1990. WSI Discussion Paper No. 177.
- Bognanni, M. and Pennekamp, J. (2011). Werkvertraege: Es geht noch billiger. *Die Zeit* 08/12/2011. Retrieved 14/02/2014 from http://www.zeit.de/2011/50/Leiharbeit-Werkvertraege.
- Bonazzi, G. and Negrelli, S. (2003). *Impresa senza confini. Percorsi, strategie e regolazione dell'outsourcing nel post-fordismo maturo*. Milano: Franco Angeli.
- Bosch, G. and Kalina, T. (2008). Low-wage work in Germany: An overview. In Bosch, G. and Weinkopf, C. *Low-wage work in Germany*. New York: Russel Sage Foundation.
- Boxall, P. and Haynes, P. (1997). Strategy and Trade Union Effectiveness in a Neo-liberal Environment. *British Journal of Industrial Relations*. 35(4): 567-591.
- Bremen macht Feierabend (2012). Gegen Fremdvergabe: Daimler KollegInnen legen Arbeit nieder. Retrieved 03/02/2014 from http://bremerfeierabend.blogsport.eu/2012/10/11/gegen-fremdvergabe-daimler-kolleginnen-legen-arbeit-nieder/
- Brennpunkt (2010). Editorial. Issue 105. June 2010. Retrieved 16/02/2014 from http://www.google.it/url?
 http://www.google.it/url?
 <a href="mailto:sa=t&rct=j&q=&esrc=s&source=web&cd=sa=t&g=&source=web&cd=sa=t&g=&source=web&cd=sa=t&g=&source=web&cd=sa=t&g=&source=web&cd=sa=
- Bronfenbrenner, K. (2000). Uneasy Terrain: The Impact of Capital Mobility on Workers, Wages, and Union Organizing. ILR Collection. Research Studies and Reports.
- Bundesagentur für Arbeit (2013). Der Arbeitsmarkt in Deutschland. Zeitarbeit in Deutschland Aktuelle Entwicklungen. Nürnberg, Bundesagentur für Arbeit. Nürnberg: Bundesagentur für Arbeit.
- Caprile, M. (2000). Outsourcing and industrial relations in motor manufacturing. Eironline.
- Carlin, W. and Soskice, D. (2009). German economic performance: disentangling the role of supply-side reforms, macroeconomic policy and coordinated economy institutions. *Socio-Economic Review* 7(1): 67–99.
- Cefic (2012). Facts and figures. The European chemicals industry in a worldwide perspective. Retrieved 20/10/2013 from http://www.cefic.org/Documents/FactsAndFigures/2012/Facts-and-Figures-2012-

The-Brochure.pdf

- Checchi, D., Visser, J. and van de Werfhorst, H.G. (2010). Inequality and Union Membership: The Influence of Relative Earnings and Inequality Attitudes. *British Journal of Industrial Relations*. 48(1): 84–108.
- Chempark (2013). Kennzahlen CHEMPARK Krefeld-Uerdingen. Retrieved 23/10/2013 from http://www.chempunkt.de/kennzahlen-72.html
- Clariant (2013). Corporate Presentation. Retrieved 15/10/2013 at http://www.clariant.com/C12575E4001FB2B8/vwLookupDownloads/Corporate_Presentation_English.pdf
- Clegg. D. (2012). Solidarity or Dualization? Social Governance, Union Preferences, and Unemployment Benefit Adjustment in Belgium and France. In Emmenegger, P., Haeusermann, S., Palier, B. and Seeleib-Kaiser, M. (2012). *The Age of Dualization. The Changing Face of Inequality in Deindustrializing Societies*. Oxford: Oxford University Press.
- Clegg, D., Graziano, P. et al. (2010). Between sectionalism and revitalisation: Trade unions and activation policies in Europe. Working Papers on the Reconciliation of Work and Welfare in Europe, RECWOWE. 07/10.
- Collier, D. (1993). The comparative method. Finifter, A.W. *Political Science: The State of the Discipline II*. Washington: American Political Science Association.
- Commons, J. R. (1909). American Shoemakers, 1648-1895. A Sketch of Industrial Evolution. *Quarterly journal of Economics*. 24(1): 39-84.
- Crozier, M., Huntington, S. P. and Watanuki, J. (1975). *The Crisis of Democracy*. New York: New York University Press.
- Daimler (2012). *Annual Report 2012*. Retrieved 14/02/2014 from https://www.daimler.com/Projects/c2c/channel/documents/2287152_Daimler_Annual_Report_2012.pdf
- Davidsson, J. and Naczyk, M. (2009). The Ins and Outs of Dualisation: A Literature Review. Working Papers on the Reconciliation of Work and Welfare in Europe, RECWOWE. 02/09.
- Davidsson, J. and Emmenegger, P. (2013). Defending the organisation, not the members: Unions and the reform of job security legislation in Western Europe. *European Journal of Political Research.* 52(3): 339–363.
- DC Workers News (2004). Gemeinsamer Widerstand gegen Dienstleister-Billigtarif!. Retrieved 16/02/2014 from http://labournet.de/branchen/auto/dc/allg/dcwn2.pdf.
- Der Betriebsrat (2013). Ausgabe Maerz 2013. Retrieved 18/10/2013 from http://leverkusen.igbce.de/download/26076-27870/2/br-info-lanxess-maerz.pdf
- DGB (2013). Die Mitglieder der DGB-Gewerkschaften. 1950-2012. Retrieved 27/01/2014 from http://www.dgb.de/uber-uns/dgb-heute/mitgliederzahlen.
- Doellgast, V. (2008). National industrial relations and local bargaining power in the US and German telecommunications industries. *European Journal of Industrial Relations*. 14(3): 265-287
- Doellgast, V. (2012). Disintegrating Democracy at Work. Labour Unions and the Future of

- Good Jobs in the Service Economy. Itacha: Cornell University Press.
- Doellgast, V., and Greer, I. (2007). Vertical Disintegration and the Disorganization of German Industrial Relations. *British Journal of Industrial Relations*, 45(1): 55-76.
- Doellgast, V., Batt, R. and Soerensen, O.H. (2009). Introduction: Institutional Change and Labour Market Segmentation in European Call Centres. *European Journal of Indutrial Relations*. 15 (4): 349–371.
- Doellgast, V., Nohara, H. and Tchobanian, R. (2009a). <u>Institutional change and the restructuring of service work in the French and German telecommunications industries</u>. *European Journal of Industrial Relations*. 15(4): 373-394.
- Doeringer P. J. and Piore M. (1971). *Internal Labor Markets and Manpower Analysis*. Lexington, Mass: Heath Lexington Books.
- Dribbusch, H. (2012). Sozialpartnerschaft und Konflikt: Gewerkschaftliche Krisenpolitik am Beispiel der Automobilindustrie. *Zeitschrift für Politik.* 59(2): 123-143.
- Dribbusch, H. and Birke, P. (2012). <u>Die Gewerkschaften in der Bundesrepublik</u>
 <u>Deutschland. Organisation, Rahmenbedingungen, Herausforderungen</u>. Berlin: Friedrich-Ebert-Stiftung.
- Dudenhöffer, F. and C. Büttner (2006). Der Wettbewerbsfaktor Zeitarbeit in der Automobilindustrie. *ifo Schnelldienst* 9.
- Duennemeier, H. (2008). Dienstleistungstarifvertraege ein Instrument zur Verhinderung von Outsourcing und Tarifflucht. In Bispink, R. *Verteilungskaempfe und Modernisierung. Aktuelle Entwicklungen in der Tarifpolitik.* Hamburg: VSA Verlag.
- Ebbinghaus, B., Göbel, C. and Koos, S. (2008). "Mitgliedschaft in Gewerkschaften: Inklusionsund Exklusionstendenzen in der Organisation von Arbeitnehmerinteressen in Europa". Mannheimer Zentrum fuer Europaeische Sozialforschung. Working Paper 111.
- Eichhorst, W. and P. Marx (2011). Reforming German Labour Market Institutions: A Dual Path to Flexibility. Journal of European Social Policy. 21(1): 73-87.
- Ellguth, P. and Kohaut, S. (2008). Branchentarifvertrag: Neu gegründete Betriebe sind seltener tarifgebunden. *IAB-Kurzbericht* 16.
- Ellguth, P. and Kohaut, S. (2010). Auf der Flucht? Tarifaustritte und die Rolle von Öffnungsklauseln. *Industrielle Beziehungen*. 17(4): 345 371.
- Elster, J. (1998). A plea for mechanisms. In Hedstroem, P. and Swedberg, R. *Social Mechanisms. An analytical approach to social theory.* Cambridge: Cambridge University Press.
- Emmenegger, P., Haeusermann, S., Palier, B. and Seeleib-Kaiser, M. (2012). *The Age of Dualization. The Changing Face of Inequality in Deindustrializing Societies*. Oxford: Oxford University Press.
- Emmenegger, P. and Careja, R. (2012). From Dilemma to Dualization: Social and Migration Policies in the "Reluctant Countries of Immigration". In Emmenegger, P., Haeusermann, S., Palier, B. and Seeleib-Kaiser, M. *The Age of Dualization. The Changing Face of Inequality in Deindustrializing Societies*. Oxford: Oxford University Press.
- Festel, G. and Würmseher, M. (2013). Challenges and strategies for chemical/industrial parks in Europe. *Journal of Business Chemistry*. 10(2): 59-66. Retrieved 15/10/2013 from http://www.businesschemistry.org/downloads/issues/Issue06-2013.pdf

- Flanders, A. (1970). Management and unions: the theory and reform of industrial relations. London: Faber.
- Flecker, J. (2009). Outsourcing, Spatial Relocation and the Fragmentation of Employment. *Competition&Change*. 13(3): 251-266.
- Flecker, J., Holtgrewe, U., Schönauer, A. Dunkel, W. and Meil, P. (2008). *Restructuring across value chains and changes in work and employment.* Synthesis report, WORKS project. Leuven: HIVA.
- Flecker, J. and Meil, P. (2010). Organisational restructuring and emerging service value chains: implications for work and employment. *Work, Employment and Society*. 24(4): 680-698.
- Follis, and Enrietti, A. (2002). Improving performance at the second tier of the automotive supply chain: Fiat's "Guided improvement" programme in comparative perspective. Presentation at the 10th Gerpisa international colloquium. Retrieved 14/02/2014 from http://gerpisa.org/rencontre/10.rencontre/papers.pdf/Follis.pdf,
- Foster, D. and Scott, P. (1998). Conceptualising Union Responses to Contracting Out Municipal Services, 1979–97. Industrial Relations Journal. <u>29(2)</u>: 137–150.
- Fraunhofer Institut (2006). Lieferantenparks in der Automobilindustrie. Retrieved 31/01/2014 from http://www.archiv.fraunhofer.de/archiv/events2005-2008/fhg/Images/Lieferantenparks tcm5-59657.pdf
- Frege, C. and Kelly, J. (2004). *Varieties of Unionism: Strategies for Union Revitalization in a Globalizing Economy*. Oxford: Oxford University Press.
- Gautié, J. and Schmitt, J. (2010). *Low-wage work in the wealthy world*. New York: Russell Sage Foundation.
- George, A. L. and Bennett, A. (2005). *Case studies and theory development in the social sciences*. MIT Press: Cambridge and London.
- Gereffi, G. and Korzeniewicz, M. (1994). *Commodity Chains and Global Capitalism*. Westport: Praeger.
- Gereffi, G, Humphrey, J. and Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy.* 12(1): 78–104.
- Gerring, J. (2007). *Case Study Research. Principles and Practices*. Cambridge: Cambridge University Press.
- Gesamtmetall (2012). Zeitarbeit M+E-Industrie. Nachlassende Konjunktur führt zu weniger Zeitarbeit. Retrieved 19.11.2013 from http://www.gesamtmetall.de/gesamtmetall/meonline.nsf/id/DE_Zeitarbeiter? OpenDocument&popup=1
- Gester, J. (2010). <u>Betriebsratswahlen in der Autoindustrie</u>. Ergebnisse bei Daimler und Opel. *Sozialistische Zeitung* 5.
- Goldthorpe, J. H. (1984). The End of Convergence: Corporatist and Dualist Tendencies in Modern Western Societies. In J. H. Goldthorpe. *Order and Conflict in Contemporary Capitalism*. New York: Oxford University Press.
- Greer, I. (2008). Organized industrial relations in the information economy: The German automotive sector as a test case. *New Technology, Work and Employment*. 23(3): 181-196.
- Grimshaw, D. and Rubery J. (1998). Integrating the Internal and External Labour Markets. *Cambridge Journal of Economics*. 22(2): 199-220.

- Grimshaw, D. and Rubery, J. (2005). Inter-Capital Relations and the Network Organisation. *Cambridge Journal of Economics*. 29(6): 1027-1051.
- Grimshaw, D., Marchington, M., Rubery, J. and Willmott, H. (2005). Introduction: Fragmenting Work Across Organisational Boundaries. In Marchington, M., Grimshaw, D., Rubery, J. and Willmott, H. (2005). *Fragmenting Work. Blurring Organisational Boudaries and Disordering Hierarchies*. Oxford: Oxford University Press.
- Gumbrell-McCormick, R. (2011). European Trade Unions and 'Atypical' Workers. *Industrial Relations Journal*. 42(3): 293-310.
- Haipeter, T. (2011). "Unbound" employers' associations and derogations: erosion and renewal of collective bargaining in the German metalworking industry. *Industrial Relations Journal*. 42(2): 174-194.
- Haipeter, T. (2013). Union Renewal and Business Strategies. Strategic Codetermination of Works Councils and the Campaign "Better Not Cheaper" of the German Metalworkers' Union. *International Business Research*. 6(3): 40-57.
- Haipeter, T. and Banyuls, R. (2007). Arbeit in der Defensive? Globalisierung und die Beziehungen zwischen Arbeit und Kapital in der Automobilindustrie. *Leviathan* 35: 373-400.
- Handelsblatt (2013). Daimler-Betriebsrat geht auf die Barrikaden. *Handelsblatt* 08/10/2013. Retrieved 12/02/2014 from http://www.handelsblatt.com/unternehmen/industrie/werkvertraege-daimler-betriebsrat-geht-auf-die-barrikaden/8898460.html.
- Hassel, A. (1999). The Erosion of the German System of Industrial Relations. *British Journal of Industrial Relations* 37(3): 483-505.
- Hassel, A. (2007). The Curse of Institutional Security: The Erosion of German Trade Unionism. *Industrielle Beziehungen* 14(2): 176-191.
- Hassel A. (2014). The Paradox of Liberalization Understanding Dualism and the Recovery of the German Political Economy. *British Journal of Industrial Relations*. 52(1): 57–81.
- Hassel, A. and Rehder, B. (2001). Institutional Change in the German Wage Bargaining System The Role of Big Companies. MPIfG Working Paper 01/9.
- Heery, E. (2009). Trade Unions and Contingent labour: Scale and Method. *Cambridge Journal of Regions, Economy and Society*, 2: 429-442.
- Heery, E. e Adler, L. (2004). Organizing the Unorganized. In Frege, C. and Kelly, J. *Varieties of Unionism. Strategies for Union Revitalization in a Globalizing Economy.* Oxford: Oxford University Press.
- Helper, S. (1990). Subcontracting: Innovative Labor Strategies. *Labor Research Review*. 1(15): 89-99.
- Henderson, J., Dicken, P., Hess, M., Coe, N. and Yeung, H. W.-C. (2002). Global production networks and the analysis of economic development. *Review of International Political Economy*. 9(3): 436–464.
- Hendrix, U., Abendroth, C. and Wachtler, G. (2003). *Outsourcing und Beschäftigung*. Munich: Rainer Hampp Verlag.
- Herrigel, G. (1993). Identity and Institutions: The Social Construction of Trade Unions in the United States and Germany in the Nineteenth Century. *Studies in American*

- Political Development. 7(2): 371-394.
- Holmes, J. (2004). *Re-scaling collective bargaining: union responses to restructuring* in the North American auto industry. *Geoforum*. 35: 9–21.
- Holst, H. (2014). 'Commodifying institutions': vertical disintegration and institutional change in German labour relations. *Work, Employment and Society*. 28(1): 3-20.
- Holst, H., Nachtwey, O., and Dörre, K. (2010). The Strategic Use of Temporary Agency Work Functional Change of a Non-standard Form of Employment. *International Journal of Action Research*, 6(1): 108-138.
- Huber, B. (2007). Beteiligung noch mehr leben. Retrieved 22/10/2011, from http://www.igmetall-bayern.de/News-Ansicht.26+M514f6fac000.0.html.
- Hyman, R. (1992). Trade Unions and the Disaggregation of the Working Class. In Regini, M. *The Future of Labour Movements*. SAGE: London.
- Hyman, R. (1994). Changing Trade Unions Identities and Strategies. In Hyman, R. and Ferner, A. *New Frontiers in European Industrial Relations*. Blackwell: Oxford.
- Hyman, R. (1997). The Future of Employees Representation. *European Journal of Industrial Relations*. 35(3): 309-336.
- Ichino, P. (2006). A che cosa serve il sindacato. Le follie di un sistema bloccato e la scommessa contro il declino. Milano: Oscar Mondadori.
- ICTWSS (2013). Database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts in 34 countries between 1960 and 2007. Retrieved 27/01/2014 from http://www.uva-aias.net/208.
- IFG Ingolstadt (2014). GVZ Ingolstadt. Ingolstadt: IFG Ingolstadt. Retrieved 14/02/2014 from http://www2.ingolstadt.de/media/custom/465_2264_1.PDF?1387528362.
- IG BCE (2010). *Chemieparks Herausforderung für die Betriebs- und Tarifpolitik*. IG BCE Landesbezirk Nordrhein. Düsseldorf.
- IG BCE Nordrhein (2013). Missbrauch von Leiharbeit. Der Gesetzgeber bleibt gefordert. Retrieved 22/10/2013 from http://nordrhein.igbce.de/download/25332-61692/1/pressemitteilung--1-.pdf
- IG Metall (2007). *Sozialreport Zeitarbeit*. Berlin: IG Metall Bezirksleitung Berlin-Brandenburg-Sachsen.
- IG Metall (2008). *Gemeinsam für Gerechtigkeit. Aktionsbuch für Betriebsräte, Vertrauensleute und Aktive*. Frankfurt am Main: IG Metall Vorstand.
- IG Metall (2009). Hilfe für Leiharbeitnehmer in Zeiten der Krise. Retrieved 06/02/2014 from http://www.igmetall-ingolstadt.de/aktuelles/artikel/datum/2009/03/02/hilfe-fuer-leiharbeitnehmer-in-zeiten-der-krise/
- IG Metall (2010). Betriebsräteumfrage der IG Metall zur Leiharbeit. Retrieved 14/02/2014, from http://www.igmetall.de/cps/rde/xchg/SID-0A456501-BA041359/internet/style.xsl/betriebsraeteumfrage-zur-leiharbeit-5541.htm.
- IG Metall (2011a). Feste Beschäftigte im Betrieb, keine ungesicherten Randbelegschaften! IG Metall Baden-Wuerttemberg: Stuttgart
- IG Metall (2011b). Geschaeftsbericht 2007-2010.
- IG Metall (2011c). Viel Arbeit am Rand. Werkverträge und Outsourcing: Arbeitshilfe für Betriebsräte. Frankfurt: IG Metall Vorstand.

- IG Metall (2012). Arbeit: sicher und fair! Fokus Werkvertraege. Fakten und Hintergründe. Frankfurt: IG Metall Vorstand.
- IG Metall (2013a). Längst kein Randphänomen mehr. Werkverträge von der Ausnahme zur Regel http://www.igmetall.de/werkvertraege-von-der-ausnahme-zur-regel-12537.htm
- IG Metall (2013b). Dossier Werkvertraege 2013. IG Metall NRW
- IG Metall (2013c). "Unser eigentliches Ziel bleibt die Festanstellung". Interview mit Erich Klemm, Vorsitzender des Gesamtbetriebsrats Daimler. Retrieved 28/01/2014 from http://www.igmetall.de/interview-mit-erich-klemm-vorsitzender-des-gesamtbetriebsrats-12664.htm
- IG Metall (2014). Wir im GVZ! Retrieved 13/02/2013 from http://www.igmetall-gvz.de/wir-im-gvz/
- IG Metall Daimler (2013). Vorstand lässt Verhandlungen über fairen Umgang mit Leiharbeit und Werkverträgen in der Daimler AG scheitern. Press reliese. Retrieved 12/=2/2014 from http://www.daimler.igm.de/news/meldung.html?id=61120
- Iversen, T. and Soskice, D. (2009). Dualism and Political Coalitions: Inclusionary Versus Exclusionary Reforms in an Age of Inequality. Paper presented at the 2009 Annual Meeting and Exhibition of the American Political Science Association. Toronto, ON.
- Iwanowski, C. (2008). Leiharbeit wenn dann fair! Retrieved 20/02/2014 from http://www.bzo.de/data_de/downloads_und_seminarmaterialien/downloads/Seminarmaterialien/03 Brauertagung2008/Vortrag, Leiharbeit, Iwanowski, pdf.
- Jackson, G. (2005). Contested boundaries: ambiguity and creativity in the evolution of German codetermination. In Streeck, W. and Thelen, K. Beyond Continuity: Explorations in the Dynamics of Advanced Political Economies. Oxford: Oxford University Press.
- Jacobides, M. G. (2005). Industry change through vertical disintegration: How and why markets emerged in mortgage banking. *Academy of Management Journal*. 48(3): 465–98.
- Jaehrling, K. and Mehaut, P. (2013). "Varieties of institutional avoidance": employers' strategies in low-waged service sector occupations in France and Germany. Socio-Economic Review. 11(4): 687-710.
- Jalette, P. and Warrian, P. (2002). Contracting-Out Provisions in Canadian Collective Agreements: A Moving Target. *Workplace Gazette* 5(1): 64-76.
- Jonker-Hoffrén, P. (2011). Whose Constituency? Representativeness of the Finnish Paper Workers' Union, Innovation Strategies, and Outsourcing in the Finnish Paper Industry between 1980 and 2008. *Industrial Relations Journal*. 42(4): 375-391.
- Juergens, U. (2004). An Elusive Model–Diversified Quality Production and the Transformation of the German Automobile Industry. *Competition and Change*. 8(4): 411-423.
- Juergens, U. (2011). "Modularisierung und die Struktur der automobilen Wertschöpfungskette". Beckenbach, F., Freimann, J., Roßnagel, A., Walther, M. Produktverantwortung, Modularisierung und Stoffstrominnovationen. Metropolis-Verlag: Marburg.
- Juergens, U. and Krzywdzinski, M. (2006). Globalisierungsdruck und Beschäftigungssicherung Standortsicherungsvereinbarungen in der deutschen

- Automobilindustrie zwischen 1993 und 2006. WZB Discussion Papers SP III.
- Jürgens, U., Krzywdzinski, M. and Teipen, C. (2006). Changing Work and Employment Relations in German Industries Breaking Away from the German Model?

 Discussion Paper SP III 2006-302. Berlin: Wissenschaftszentrum Berlin für Sozialforschung.
- Jungvogel, C. (2013). Tarifverträge der IG BCE über Branchenzuschläge. Presentation at the "WSI-Tarifpolitische Tagung 2013 Niedriglöhne, Tarifpolitik und gesetzliche Mindestlöhne". Retrieved 12/11/2013 from http://www.boeckler.de/pdf/v 2013 09 24 jungvogel.pdf
- Kaedtler, J. (2006). Sozialpartnerschaft im Umbruch. Industrielle Beziehungen unter den Bedingungen von Globalisierung und Finanzmarktkapitalismus. VSA Verlag, Hamburg.
- Kaedtler, J. and Hertle, H.H. (1997). Sozialpartnerschaft und Industriepolitik.

 Strukturwandel im Organisationsbereich der IG Chemie-Papier-Keramik. Opladen:
 Westdeutscher Verlag.
- Kaedtler, J. and Sperling, H. J. (2002). Jenseits von Globalisierung und Finanzialisierung. Aushandlungsbeziehungen in der deutschen Chemie- und Pharmaindustrie. *Industrielle Beziehungen.* 9: 133-156.
- Kalina, T. and Weinkopf, C. (2013). Niedriglohnbeschäftigung 2011: Weiterhin arbeitet fast ein Viertel der Beschäftigten in Deutschland für einen Niedriglohn. IAQ-Report 01/2013.
- Kalleberg, J. (2003). Flexible Firms and Labor Market Segmentation: Effects of Workplace Restructuring on Jobs and Workers. *Work and Occupations*. 30(2): 154-175.
- Kamakura, Y. (2006). Corporate structural change and social dialogue in the chemical industry. Working Paper ILO.
- Kern, H. and C. Sabel (1994). Trade Unions and Decentralized Production: A Sketch of Strategic Problems in the German Labour Movement. In Regini, M. *The Future of Labour Movements*. London: Sage Publishing.
- Kinkel, S. and Lay, G. (2003). Fertigungstiefe Ballast oder Kapital? Stand und Effekte von Out- und Insourcing im verarbeitenden Gewerbe Deutschlands. Discussion Paper. Karlsruhe: Fraunhofer Institut fuer Systemtechnik und Innovationsforschung.
- Koch, A. and Wohlhueter, A. (2012). *Werkvertraege in der Arbeitswelt*. Frankfurt: Otto Brenner Stiftung.
- Kochan, T.A., Katz, H.C., McKersie, R.B. (1986). *The Transformation of American Industrial Relations*. New York: Basic Books.
- Korpi, W. (2006). Power Resources and Employer-Centered Approaches in Explanations of Welfare States and Varieties of Capitalism: Protagonists, Consenters, and Antagonists. *World Politics*. 58(2): 167-206.
- Kroos, D. and Gottschall, K. (2012). Dualization and Gender in Social Services: The Role of the State in Germany and France. In Emmenegger, P., Haeusermann, S., Palier, B. and Seeleib-Kaiser, M. *The Age of Dualization. The Changing Face of Inequality in Deindustrializing Societies*. Oxford: Oxford University Press.
- Lanxess (2013a). Lanxess at a glance. Retrieved 18/10/2013 from http://lanxess.com/en/corporate/about-lanxess/who-we-are/
- Lanxess (2013b). Krefeld-Uerdingen. Facts and figures. Retrieved 18/10/2013 from

- http://lanxess.com/en/corporate/about-lanxess/our-sites-in-germany/krefeld-uerdingen/facts-figures/
- Lee, B.H. and Frenkel, S.J. (2004). Divided Workers: Social relations between contract and regular workers in a Korean auto company. *Work, Employment and Society.* 18(3): 507–530
- Legler, H., Gehrke, M. et al. (2009). *Die Bedeutung der deutschen Autoindustrie für die deutsche Volkswirtschaft im europäischen Kontext*. Endbericht an das Bundesministerium fuer Wirtschaft und Technologie. Hannover, Mannheim.
- Lindbeck, A. and Snower, D. (1986). Wage Setting, Unemployment, and Insider-Outsider Relations. *American Economic Review.* 76(2): 235-239.
- Locke, R. and Thelen, K. (1995). Apples and Oranges Revisited: Contextualized Comparisons and the Study of Labor Politics. *Politics and Society.* 23(3): 337-367.
- Lorig, P. (2012). Werkvertraege: die neue Lohndumpingstrategie? Berlin: Rosa Luxemburg Stiftung.
- MacKenzie, R. (2000). Subcontracting and the Re-Regulation of the Employment Relationship: A Case Study from the Telecommunications Industry. *Work, Employment & Society.* 14(4): 707–726.
- MacKenzie, R. (2009). Union Responses to Restructuring and the Growth of Contingent Labour in the Irish Telecommunications Sector. *Economic and Industrial Democracy* 30(4): 539-563.
- Marchington, M., Grimshaw, D., Rubery, J. and Willmott, H. (2005a). *Fragmenting Work. Blurring Organisational Boudaries and Disordering Hierarchies*. Oxford: Oxford University Press.
- Marchington, M., Rubery, J. and Lee Cooke, F. (2005b). Prospect for Worker Voice Across Organisational Boundaries. Marchington, M., Grimshaw, D., Rubery, J. and Willmott, H. *Fragmenting Work. Blurring Organisational Boudaries and Disordering Hierarchies*. Oxford: Oxford University Press.
- Markovits, A. (1985). *The Politics of West-German Trade Unions*. Cambridge: Cambridge University Press.
- Marino, S. (2012). Trade union inclusion of migrant and ethnic minority workers: Comparing Italy and the Netherlands. *European Journal of Industrial Relations* 18(1): 5-20.
- Martinez Lucio, M. and Weston, S. (1995). Trade Unions and Networking in the Context of Change: Evaluating the Outcomes of Decentralisation in Industrial Relations. *Economic and Industrial Democracy*. 16(2): 233-252.
- Meardi, G. (2012). Social Failures of EU Enlargement. A Case of Workers Voting with Their Feet. London: Routledge.
- Méhaut, P., Berg, P. Grimshaw, D. Jaehrling, K. (2010). Cleaning and nursing in hospitals: Institutional Variety and the reshaping of low-wage jobs. In Gautié, J. and Schmitt, J. Low-wage work in the wealthy world. New York: Russell Sage Foundation.
- Meil, P., Tengblad, P. and Doherty, P. (2009). Value chain restructuring and industrial relations. The role of workplace representation in changing conditions of employment and work. WORKS Project Reports.
- Meissner, H.R. (2013). Logistik- und Entwicklungsdienstleister in der deutschen Automobilindustrie neue Herausforderungen für die Gestaltung der

- Arbeitsbeziehungen. OBS Arbeitspapier 9.
- Meissner, H.R. (2009). Automobilproduktion in der Prozess- oder Wertschöpfungskette. Retrieved 29/01/2014 from http://www.hrmeissner.de/dgb_brannenburg_10-2009.pdf
- Meissner, H.R. And Bochum, (2011). Industrie- und Produktions- Services. Studie zu einer Branche "under cover". Unpublished study for the IG Metall Vorstandsverwaltung FB Betriebspolitik/Industrielle Dienstleistungen. Frankfurt.
- Minijobzentrale (2010). Aktuelle Entwicklungen im Bereich der geringfügigen Beschäftigung. Quartalsbericht 1. Essen
- Mommsen, K. (2014). IG Metall hat Werkverträge und Leiharbeit im Fokus. *Suedkurier*15/01/2014. Retrieved 11/02/2014 from http://www.suedkurier.de/region/bodenseekreis-oberschwaben/friedrichshafen/IG-Metall-hat-Werkvertraege-und-Leiharbeit-im-Fokus;art372474,6611445.
- Moore, S., Jeffreys, S. and Cours-Salies, P. (2007). Why do Europe's unions find it difficult to organise in small firms? *Transfer.* 13(1): 115-130.
- Mueller, M. (2011). Wider die Billiglohnlinie. Die Mitbestimmung 1+2: 28-31.
- Mueller-Jentsch, W. (1995). Germany: From Collective Voice to Co-Management. In Rogers, J. and Streeck, W. *Works councils. Consultation, Representation and Cooperation in Industrial Relations*. Chicago/London: The University of Chicago Press.
- Murray, F. (1993). The Decentralisation of Production—The Decline of the Mass-collective Worker? *Capital and Class.* 19: 74–99.
- Nicklich, M. and Helfen, M. (2013). Between institutional continuity and deinstitutionalization: Industrial Services as a parallel world of wage-setting. Paper presented at the 10th European ILERA Conference. 20-22 June 2013, Amsterdam.
- Nowak, I. (2013). Zulieferer schafft 5200 Arbeitsplätze. *Stuttgarter Zeitung* 13/12/2013. Retrieved 11/02/2014 from http://m.stuttgarter-zeitung.de/inhalt.zf-friedrichshafen-zulieferer-schafft-5200-arbeitsplaetze.8bc05f4c-56e9-4e4a-bac2-fd0b32ddad1c.html
- Obinger, H., Starke, P. & Kaasch, A. (2011). Responses to labor market divides in small states since the 1990s. In Emmenegger, P., Haeusermann, S., Palier, B. and Seeleib-Kaiser, M. (2012). *The Age of Dualization. The Changing Face of Inequality in Deindustrializing Societies*. Oxford: Oxford University Press.
- OECD (2004). OECD Employment Outlook 2004. Paris: OECD.
- Offe, C. and Wiesenthal, H. (1980). Two Logics of Collective Action: Theoretical Notes on Social Class and Organizational Form. *Political Power and Social Theory.* 1: 67-115.
- Osterman, P. (1994). Internal Labor Markets: Theory and Change. In Kerr, C. and Staudohar, P.D. *Labor Economics and Industrial Relations: Markets and Institutions*. Cambridge (MA)/London: Harvard University Press.
- Palier B. and Thelen K. (2010). Institutionalizing Dualism: Complementarities and Change in France and Germany. *Politics&Society.* 38(1): 119-148.
- Perraudin, C., Petit, H., Thèvenot, N., Tinel, B. and Valentin, J. (2013). Inter-firm Dependency and Employment Inequalities: Theoretical Hypotheses and Empirical Tests on French Subcontracting Relationships. *Review of Radical Political Economics*.

- Piore, M. J. (1975). Notes for a theory of labor market stratification. In. Edwards, R., Reich, M. and Gordon, D. M. *Labor market segmentation*. Lexington, Mass.: D.C. Heath.
- Piotto, I. (2001). Dal just-in-time alla produzione modulare. Rapporto tra imprese e problemi di relazioni industriali. DSS Working paper 01/04.
- Pfohl, H.C. and Garais, K. (2005). Supplier parks in the German automotive industry: A critical comparison with similar concepts. *International Journal of Physical Distribution & Logistics Management*. 35(5): 302-317.
- Pontusson, J. (2013). Unionization, Inequality and Redistribution. *British Journal of Industrial Relations*.
- Promberger, M. (2012). *Topographie der Leiharbeit. Flexibilitaet und Prekaritaet einer atypischen Beschaeftigungsform*. Berlin: Edition Sigma.
- Provadis (2013). Fakten und Zahlen von Provadis im Überblick. Retrieved 17/10/2013 from https://www.provadis.de/ueber-provadis/provadis-in-zahlen/
- Przeworski, A. and Teune, H. (1970). *The logic of comparative social inquiry*. New York/London/Toronto/Sydney: Wiley-Interscience.
- Pulignano, V. (2003). Relazioni sindacali e contesti "multi-impresa": l'esperienza del settore dell'auto in Italia. In Bonazzi, G. and Negrelli, S. (2003). *Impresa senza confini. Percorsi, strategie e regolazione dell'outsourcing nel post-fordismo maturo*. Milano: Franco Angeli.
- Pulignano, V. (2005). Union responses to 'multi-enterprise' factories in the Italian motor industry. *Industrial Relations Journal*. 36(2): 157-173.
- Pulignano, V. and Doerflinger, N. (2013). A head with two tales: trade unions' influence on temporary agency work in Belgian and German workplaces. *The International Journal of Human Resource Management*. 24(22): 4149-4165.
- Pulignano, V. and Stewart, M. (2013). Firm-level restructuring and union strategies in Europe: local union responses in Ireland, Italy and the Netherlands. *Work, employment and society.* 27(5): 842–859.
- Regalia, I. (1988). Democracy and Unions: Towards a Critical Appraisal. *Economic and Industrial Democracy* 9: 345-371.
- Regalia, I. (2009). *Quale Rappresentanza? Dinamiche e prospettive del sindacato in Italia*. Roma: Ediesse.
- Regini, M. (1981). I dilemmi del sindacato: conflitto e partecipazione negli anni Settanta e Ottanta. Bologna: Il Mulino.
- Rehder, B. (2003). Betriebliche Bündnisse für Arbeit in Deutschland: Mitbestimmung und Flächentarif im Wandel. Frankfurt: Campus Verlag.
- Reich, M., Gordon, D. M. and Edwards, R. C. (1973). A Theory of Labor Market Segmentation. *The American Economic Review.* 63 (2): 359-65.
- Rentmeister, B. (2002): Einbindung und standörtliche Organisation von Ingenieurdienstleistern in der Automobilentwicklung. Research report. Institut für Wirtschafts- und Sozialgeographie, Johann Wolfgang Goethe-Universität Frankfurt.
- Roland Berger (2010). Industrieservices in Deutschland. Status Quo und zukünftige Entwicklung. Retrieved 14/02/2014 from http://www.verlag-henrich.de/fileserver/henrich/files/4746.pdf

- Rubery, J. (2007). Developing Segmentation Theory. A Thirty-year Perspective. *Economie et Sociétès*. 28(6): 941-964.
- Rueda, D. (2007). Social democracy inside out. Partisanship and labour market policy in industrialised democracies. Oxford: Oxford University Press.
- Rutherford, T.D. and Gertler, M.S. (2002). Labour in 'lean' times: geography, scale and the national trajectories of workplace change. *Transactions of the Institute of British Geographers*. 27(2): 195-212.
- Salento, A. e Masino, G. (2013). *La fabbrica della crisi. Finanziarizzazione delle imprese e declino del lavoro*. Roma: Carocci.
- Savage, L. (2006). Justice for Janitors: Scales of Organizing and Representing Workers. *Antipode*. 38(3): 645-666.
- Scheuplein, C., Juergens, U. et al. (2007). Im Windschatten beschleunigt: Die Automobilindustrie in Ostdeutschland 1995–2006. Ansatzpunkte einer arbeitsorientierten Branchenstrategie. OBS Arbeitspapier 47.
- Schiermeyer, M. (2013). "Das Lohnniveau ist insgesamt zu hoch bei uns" Interview mit Südwestmetall-Chef Wolf. *Stuttgarter Zeitung*. 13.09.2013. Retrieved 13.11.2013 from http://www.stuttgarter-zeitung.de/inhalt.interview-mit-suedwestmetall-chef-wolf-das-lohnniveau-ist-zu-hoch.0699d0d1-86f0-40dd-a45e-d7b71e9648f4.html
- Schmitter, P. and Streeck, W. (1999). The Organization of Business Interests: Studying the Associative Action of Business in Advanced Industrial Societies. MPIfG Discussion Paper 99/1.
- Schnabel, C. and Wagner, J. (2007). Union density and determinants of union membership in 18 EU countries: evidence from micro data 2002/03. *Industrial Relations Journal* 38(1): 5-32.
- Schnellecke (2013). Retrieved 13.11.2013 from <a href="http://www.schnellecke.com/data/schnellecke.com/data/schnellecke.com/data/schnellecke.com/data/schnellecke.com/data/schnellecke.com/data/schnellecke.com/data/schnellecke.com/data/schnellecke.com/data/schnellecke.data/schnel
- Schulte, S. (2011). IG Metall zeigt ver.di die Muskeln. *Westdeutsche Allgemeine Zeitung*, 05/12/2011. Retrieved 05/02/2014 from http://www.derwesten.de/wirtschaft/ig-metall-zeigt-verdi-die-muskeln-id6137571.html
- Schumann, D. (2013). Tarifverträge über Branchenzuschläge eine erste Bilanz. Retrieved 19.11.2013 from http://www.boeckler.de/pdf/v 2013 09 24 schumann.pdf
- Schwander, H. and Häusermann, S. (2013). Who is in and who is out? Proposing a risk-based conceptualisation of insiders and outsiders. *Journal of European Social Policy*. 23(3): 248-269.
- Schwitzer, H. (2012). Den Zuschlag mehr als verdient. Retrieved 23/04/2012 from http://www.igmetall.de/cps/rde/xchg/internet/style.xsl/interview-mit-helga-schwitzer-zum-inkrafttreten-der-10759.htm
- Seifert, H. and Massa-Wirth, H. (2005). Pacts for employment and competitiveness in Germany. *Industrial Relations Journal*. 36(3): 217-240.
- Sinn, H.W. (2003). Ist Deutschland noch zu retten? München: Econ.
- Statistisches Bundesamt (2010). Befristete Beschäftigung: Jeder elfte Vertrag hat ein Verfallsdatum. *Destatis*, 16 March.
- Streeck, W. (1984). Neo-Corporatist Industrial Relations and the Economic Crisis in West

- Germany. In J. H. Goldthorpe. *Order and Conflict in Contemporary Capitalism*. New York: Oxford University Press.
- Streeck W. (1991). On Institutional Conditions of Diversified Quality Production. In Matzner, E. and Streeck, W. *Beyond Keynesianism. The Socio-Economic of Production and Full Employment*. Aldershot/Brookfield: Edwar Elgar.
- Streeck, W. (1993). Klasse, Beruf, Unternehmen, Distrikt. Organisationsgrundlagen industrieller Beziehungen im europaischen Binnenmarkt. In S. B and M. Dierkes. *Innovation und Beharrung in der Arbeitspolitik*. Stuttgart: Schaffer Poeschel.
- Streeck, W. (2009). *Re-Forming Capitalism. Institutional Change in the German Political Economy.* Oxford: Oxford University Press.
- Streeck, W. (2013). *Gekaufte Zeit: Die vertagte Krise des demokratischen Kapitalismus*. Berlin: Suhrkamp.
- Streek, W. and Hassel, A. (2004). The Crumbling Pillars of Social Partnership. *West European Politics*. 26(4): 101-124.
- Stuttgarter Zeitung (2013). Mindeststandards fuer Werkvertraege. Retrieved 28/01/2014 from http://www.stuttgarter-zeitung.de/inhalt.daimler-mindeststandards-fuer-werkvertraege.32b19e6f-92d6-455e-9817-881eb6f07027.html
- Swenson, P. (1991). Labor and the limits of the welfare state: the politics of intraclass conflict and cross-class alliances in Sweden and West Germany. *Comparative Politics*. 23(4): 379-399.
- Tectrion (2013). Unternehmensdaten und Fakten. Retrieved 23/10/2013 from http://www.tectrion.de/unternehmen/zahlen-fakten.html
- Telljohann, V. (2006). Processi di ristrutturazione e regolazione sociale il caso tedesco. In Bardi, A., Garibaldo, F. and Telljohann, V. *A passo d'auto. Impresa e lavoro nel settore automobilistico*. Santarcangelo di Romagna: Maggioli Editore.
- Thelen, K. (2001). Varieties of Labour Policies. In Hall, P. A. e Soskice, D.W. *Varieties of Capitalism. The Institutional Foundations of Comparative Advantage*. Oxford: Routledge.
- Thelen, K. (2012). Varieties of Capitalism: Trajectories of Liberalization and the New Politics of Social Solidarity. *Annual Review Political of Science*. 15: 137–59.
- Thelen, K. and Kume, I. (2006). Coordination as a political problem in Coordinated Market Economies. *Governance*. 19(1): 11-42.
- Thelen, K. and van Wijnbergen, C. (2003). The paradox of globalization: labour relations in Germany and beyond. *Comparative Political Studies* 36: 859–80.
- Turner, L. (2009). Institutions and Activism: Crisis and Opportunity for a German Labor Movement in Decline. *Industrial & Labor Relations Review.* 62(3): 294-312.
- VCI (2013a). Chemiewirtschaft in Zahlen. Retrieved 18/10/2013 https://www.vci.de/Services/Publikationen/Broschueren-Faltblaetter/Seiten/Chemiewirtschaft-in-Zahlen.aspx
- VCI (2013b). Standorte der Chemieparks im Überblick. Retrieved 14/10/2013 at https://www.vci.de/Downloads/PDF/Chemieparks%20-%20Zahlen,%20Daten%20und%20Standortinfos.pdf
- VDA (2008). Jahresbericht 2010. Frankfurt am Main, Verband der Deutschen Autoindustrie.

- VDA (2010). Jahresbericht 2010. Frankfurt am Main, Verband der Deutschen Autoindustrie.
- VDA (2013a). Allgemeines. Retrieved 19.11.2013 from http://www.vda.de/de/zahlen/jahreszahlen/allgemeines/
- VDA (2013b). Automobilproduktion. Retrieved 19.11.2013 from http://www.vda.de/de/zahlen/jahreszahlen/automobilproduktion/
- VDA (2013c). Wissmann: 2013 wird ein forderndes Arbeitsjahr. Retrieved 19.11.2013 from http://www.vda.de/de/meldungen/news/20121204-1.
- Visser, J. (2006). Union membership statistics in 24 countries. *Monthly Labour Review*. 129(1): 38-49.
- Visser, J. (2012). The rise and fall of industrial unionism. *Transfer.* 18(2): 129-141.
- Vitols, K. (2008). Zwischen Stabilitaet und Wandel: Die Sozialpartnerschaft in Deutschland und die atypische Beschaeftigungsform Zeitarbeit. Hamburg: Verlag Dr. Kova.
- Vlandas, T. (2013). The Politics of Temporary Work Deregulation in Europe Solving the French Puzzle. *Politics & Society*. 41(3): 425-460.
- Volkswagen (2012a). Experience D[r]iversity. Annual report.
- Volkswagen (2012b). Declaration on social rights and industrial relations at Volkswagen. Retrieved 13/02/2013 from
- Von Borstel, S. (2010). Leiharbeiter bekommen erstmals das gleiche Gehalt. *Die Welt* 30/09/2010. Retrieved 13/02/2014 from http://www.welt.de/wirtschaft/article9987243/Leiharbeiter-bekommen-erstmals-das-gleiche-Gehalt.html
- Voss, W. (2007). Industrie- und Chemieparks. Strukturpolitische Umbrüche und Herausforderungen in der chemischen Industrie. Research report.
- Waldinger, R., Erickson, C. Milkman, R., Mtchell, D.J.B., Valenzuela, A., Wong, K. e Zeitlin, M. (1998). Helots No More: a Case Study of the Justice for Janitors Campaigns in Los Angeles. In Bronfenbrenner, K., Friedman, S., Hurd, R.W., Oswald, R.A. *Organizing to Win: New Research an Union Strategies*. Itacha (NY): IRL Press.
- Weinkopf, C. (2009). What Stands Behind the Growth of Temporary Agency Work (TAW) in Germany? Paper presented at the Conference "The Role of Flexible Employment and Employment Intermediaries in Cushioning the Business Cycle: What Insights Can Research Contribute?" Brussel.
- Weinkopf, C. and Vanselow, A. (2008). *(Fehl-)Entwicklungen in der Zeitarbeit?* Bonn: Friedrich Ebert Stiftung.
- Wetzel, D. (2012). Industrienahe Dienstleistungen und Werkverträge. Presentation Beiratssitzung, 05/03/2013.
- Wetzel, D., Weigand, J., Niemann-Findeisen, S., Lankau, T. (2008), Organizing: die mitgliedorientierte Offensivstrategie für die IG Metall. Acht Thesen zur Erneuerung der Gewerkschaftsarbeit, www.labournet.de/diskussion/gewerkschaft/real/wetzel.pdf.
- Wex, G. (2011). Bodenseekreis Erster Tarifvertrag zur Leiharbeit. *Suedkurier* 19/11/2011. Retrieved 11/02/2014 from http://www.suedkurier.de/region/bodenseekreis-oberschwaben/bodenseekreis/Erster-Tarifvertrag-zur-Leiharbeit;art410936,5234705

- Wills, J. (2009). Subcontracted employment and its challenges to labour. *Labour Studies Journal*. 34(4): 441-460.
- Wir (2005). Retrieved 03/02/2014 from http://www2.igmetall.de/homepages/audinetz/file_uploads/wir052005.pdf
- Womack, J.P., Jones, D.T. and Roos, D. (1990). *The machine that changed the world*. Rawson: New York.
- WSI-Tarifarchiv (2013). Statistisches Taschenbuch 2013. Duesseldorf: WSI.
- Zan, S. (1992). Organizzazione e rappresentanza. Le associazioni imprenditoriali e sindacali. Roma: Nis.
- ZF (2014). Company profile. Retrieved 28/01/2014 from http://www.zf.com/corporate/en/company/organization/facts_figures/facts_figures.html
- ZF (2012). Annual Report 2012. Retrieved 14/02/2014 from http://www.zf.com/media/media/en/document/corporate_2/company_4/facts_and_figures_1/annual_report/zf_annual_report_2012.pdf
- ZF (2011). Collective agreement on flexibilisation. 18/11/2011.