

Draft

Labour Relations and Transformations in the German Manufacturing Sector: Power Resources, Strategies and Labour Regulation in Times of Crisis

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1 Introduction

In this paper we want to address the question how transformations – digital and ecological – do affect and, maybe, change labour relations in the German manufacturing sector in terms of topics, actors' strategies, conflicts and regulations? This is an important research question for at least two reasons. Firstly, the industrial sector lies at the heart of the digital and ecological transformations and their impacts on labour relations in Germany. The industrial sector is a major source of CO₂ emissions, producing more than one fifth of the emission in Germany. At the same time, it is the leading sector of the 'Industry 4.0 paradigm' and the implementation of digital technologies in such contrasting areas as production and research and development.

Secondly, manufacturing forms the core of the German not only of the German export model (Baccaro & Pontusson 2017), but also of the Germany system of labour relations. Collective agreements in industry serve as a guiding principle for the German coordinated market economy (Hall & Soskice 2001); the industrial sector is the undisputed centre of the German trade union movement, for nowhere are the trade unions stronger or their levels of organisation higher than in the core sectors of the manufacturing industry (Haipeter 2022); and labour relations are characterised by 'social partnership' for a long time (Turner 1998).

However, over the last two decades, significant changes have taken place in this model of social and industrial partnership, including the decline in collective bargaining coverage and the organisational weakness of the collective actors, as well as the decentralisation of collective agreements and concessions bargaining for job security. At the same time, German industry is in the midst of a deep crisis. Between 2019 and 2025, the number of people employed in German industry fell by around 420,000 and is now at a ten-year low (Engler et al 2026). Major industrial companies such as VW and ZF in the

automotive sector, ThyssenKrupp in the steel industry and BASF in the chemical industry have each announced job cuts in the five-figure range at their German sites. There are a number of external causes for this, such as the COVID-19 pandemic or bottlenecks in the supply of materials within transnational value chains, the war in Ukraine and the end of low energy prices, and the end of liberal globalisation – factors that have significantly favoured the export model of German industry over the past two decades (Dörre 2025).

This ‘polycrisis’ (Tooze 2022) interacts with the transformations. On the one hand, it reduces companies’ financial scope for necessary investments in green – or digital – technologies; and on the other hand, the slow growth of green markets exacerbates the crisis for companies that have invested in green technologies. Added to this are the industrial policy conditions in Germany and the EU, which, whilst defining a regulatory framework for limiting CO₂ – in the form of national climate plans, the EU Emissions Trading System or caps on CO₂ emissions from vehicle fleets – offer little investment support for green technologies or for the purchase of green products.

How are these transformations, the challenges of their implementation and the associated crises manifesting themselves in industrial relations? How do industrial relations’ actors cope with the challenges going along with this? We aim to explore this question in our paper by focusing on four key areas: the issues and problems that the labour and capital sides prioritise; the strategies they develop in response; the negotiations and conflicts that arise as a result; and the regulatory agreements reached in this context.

The range of possible issues and problems mentioned in literature is wide-ranging:

- job cuts resulting from rationalisation or digital performance monitoring, and data protection in algorithmic management (Krzywdzinski et al. 2025).
- The replacement of emission-intensive products and production processes with low-carbon alternatives, and the associated disruptions to employment (Galgosci 2020).
- Economic conditions and crises, as well as government employment or industrial policy (Greer/Lechowski 2026).
- Existing employment problems being exacerbated by restructuring, offshoring or outsourcing (Haipeter 2026).

Our analysis is based on our empirical research in three key industrial sectors: the automotive industry, the chemical industry and the steel industry. Comparing these industries not only provides a good overview of the development of industrial relations in German industry as a whole, but also allows us to examine distinctions and differences between the sectors in terms of problems, the strategies of the various actors, negotiations and regulations.

We frame our analysis by using power resource theory in order to explain why actors act and why labour relations evolve in the way they do. Using this theoretical framework, we place emphasis on two distinct aspects: firstly, we highlight the dynamic and relational nature of power resources, focusing on both trade unions and employers as actors in class struggles or cross-class coalitions; and we focus our analysis on the articulation

between the different levels of action in industrial relations – workplace and company, collective bargaining and industrial politics – and the respective allocations of issues, resources and actors, which can lead to significant differences in the nature of industrial relations across these levels.

This approach is examined in greater detail in the following chapter. The subsequent third chapter briefly summarises the state of research on the development of transformations and industrial relations in the three sectors of German industry. Chapter 4 provides an overview of the research methods. The following three chapters analyse key findings from our research on the three levels of action. Chapter 8 discusses the novelty and scope of our findings, whilst the concluding chapter draws conclusions from them and identifies areas for further research. Our analysis is based on findings from a project funded by the German Research Foundation on ‘Twin Transition and labour relations’ as part of the priority programme ‘Digitalisation of the World of Work’.

2 Power resources and labour relations

2.1 Power resources of labour and capital

The theory of power resources has now become firmly established in trade union research as a framework for explaining trade union action. This also applies to the canon of different power resources (Arnholtz & Refslund 2024; Schmalz et al. 2018). The appeal of this approach lies primarily in the fact that it links structures – the resources – and the agency of actors – the use and mobilisation of resources – to the outcomes of actions, thereby making these outcomes explicable.

Within the approach, usually five resources of power are differentiated. The *structural power* of employees and trade unions – insofar as they organise these employees – is rooted both in the scarcity of skills and in their positions of power within the workplace, based on the disruptions they can cause to the production process (Greer 2024). *Institutional power resources* – such as collective bargaining autonomy under the Collective Agreements Act in Germany, or the legal enshrinement of works councils in the Works Constitution Act – are characterised by the fact that they are underpinned by formal and enforceable norms. *Ideational power resources* are based on advocating ideas, framing issues and positioning them within social and political discourse (McLaughlin & Wright 2024). An example of this from Germany is the campaign by the German Trade Union Confederation (DGB) for the introduction of the statutory minimum wage (Bosch 2015). Additionally, trade unions can develop *coalition power* through strategic cooperation with other organisations such as associations or social movements.

Finally, *associational power* is a specific resource for trade unions, as its utilisation is a key determinant of a trade union’s capacity for making use of all the other resources. It encompasses a trade union’s level of organisation as well as its internal structure – the number, competence and areas of responsibility of its staff – and thus its ability to articulate interests and formulate strategies as the basis for collective action and the mobilisation of its members (Ibsen 2024; Brookes 2018). Crucial to this is the organisation’s

ability to select and aggregate preferences from the multitude of interests and to develop strategies on that basis (Arnholtz & Refslund 2024).

A similarly established resource model does not yet exist for employers' organisations. However, categories from trade union discourse can be adapted to employers' organisations accordingly (Dribbusch 2022; Syrovatka 2024). In this sense, structural power refers to the capacity of companies to act, which is legally and institutionally enshrined through private ownership and the resulting power of disposal. Employers' structural resources are significantly greater than those of employees, because companies are a) already collective actors; they determine b) the economic position of employees through recruitment and redundancies; they can c) take measures against trade union organisation within their workplaces (with regard to German works councils, see Behrens & Dribbusch 2020); and, finally, d) they can count on public support, because the satisfaction of society's material interests depends on the accumulation of capital (Offe/Wiesenthal 1980; Traxler 1999).

This, in turn, means that companies rely far less on the associative power resources of employers' associations to advance their interests than do their employees (Traxler 1999). The *organisational power* resources of employers' associations therefore rest primarily on their members' willingness to use their structural power to achieve the association's objectives. The potential *institutional power resources* of employers' associations include compulsory membership or the widespread use of 'declarations of generally binding agreements' by states; however, these power resources are not strongly developed in Germany because employers' associations attach significantly less weight to their own institutional power resources than to their members' structural power resources and their potential interest in 'negative freedom of association' under the German Basic Law, that is, the possibility of opting out of collective representation.

Much like structural power resources, the *ideational power resources* of companies and employers' associations are considerable. Larger companies, in particular, have the resources to develop their own political strategies, present themselves to the public and promote their product or labour market interests. But the associations, too, can develop initiatives like the 'New Social Market Economy' (NSM) initiative of the employers' association Gesamtmetall (Kinderman 2014). This also gives rise to a *coalitional power* of the associations in terms of coalitions with political parties or company friendly think-tanks.

2.2 Dynamics, relationality and articulation of power resources

Three important clarifications of the concept have been made in the debate on power resources, which guide our analysis, namely regarding the dynamics, relationality and articulation of power resources.

The first clarification is that power resources do not constitute a fixed stock from which actors can draw resources, but rather that they are a *dynamic variable* whose extent depends on various internal and external factors (Arnholtz & Refslund 2024). A key internal factor is the efforts made by collective actors to expand their power resources, particularly with regard to their associational power resources. Trade union and employers'

organisations can deploy human and financial resources to recruit and organise members, or to organise their staff more efficiently or provide them with better training. Since the 2010s, German trade unions have developed strategies for recruiting members; and employers' organisations are attempting, with the help of the OT-associations, to attract new members or retain existing ones, albeit without these members being covered by collective bargaining agreements (Schroeder 2018).

By contrast, there are primarily two external factors that can alter the power resources of trade unions. The first is the *social and political context*, which becomes relevant primarily in the form of government action and legislation (Fox-Hodess 2019). This applies to legislation directly concerning industrial relations and trade union rights, as well as to labour market legislation and the associated rights and entitlements of workers, but also to social policy and to the state's economic and industrial policy, which is framed by fiscal policy. In this way, government policy simultaneously influences the second external factor: the *business cycle* and the economic situation (Greer & Lechowski 2026). Economic crises reduce trade unions' ability to assert themselves because companies' profits fall and workers face the threat of redundancies, thereby diminishing their capacity for mobilisation. Added to this is the possibility of cost-cutting relocations of businesses or activities abroad.

These interrelationships demonstrate that the resources of power and their utilisation by the interest groups representing capital and labour are *relationally* interconnected. Relationality applies both to the availability of resources and to the strategies for their utilisation, which always depend on the development of resources and utilisation strategies of the other side.

The relational nature of the associations between capital and labour is governed by two logics. The first logic is that of *structured antagonism*: the class conflicts inherent in the employment relationship and regulated by institutions, centring on the distribution of economic value or on control within the workplace hierarchy (Edwards 2006). Although characterised by antagonism, the power resources of the actors do not operate as in a zero-sum game. Because companies possess strong power resources of their own, the power resources of their employers' associations paradoxically increase with the strength of the opposing side. The more companies find themselves facing organisationally powerful trade unions, the more attractive employers' associations become to them – both as a collective resource against strikes and as a collective bargaining actor that negotiates collective agreements.

The second logic of relationality – which at first glance appears to contradict the first – is based on *the mutual interests* of employees and companies (Offe & Wiesensthal 1980; Swenson 1991), which can lead to cross-class coalitions between capital and labour. On the one hand, employees' material interests and the security of their jobs depend on the competitiveness and economic success of their companies as employers, which they therefore do not wish to jeopardise with their demands; and on the other hand, the economic viability of companies also depends on motivated and – at least for certain activities – well-qualified employees. This can give rise to a shared interest in ensuring that they

improve economic viability. Mutual interests in economic viability can also be directed outwards and addressed to policymakers. In the case of large companies, management and employee representatives can complement one another in this regard. At the level of employers' or business associations, this takes the form of articulating sectoral interests. In the context of transformations, these may relate to state regulations and support for the introduction of new technologies.

Furthermore, the power resources are distributed across several levels of industrial relations, which simultaneously constitute different levels of action for the actors representing capital and labour. Following Wright (2020), a distinction can be made between the levels of 'workplace and company', 'sector' and 'politics', to which transnational levels of action are added. A key question regarding the associational power resources of interest groups is how interests and preferences, issues, strategies and resources are distributed across these levels, and how the actors interact at and between these levels. We refer to these interrelationships as '*articulation*' (Haipeter et al 2018).

At the same time, the division of labour between these levels depends very much on the institutional systems governing industrial relations. In the German system – or those parts of it that have not been eroded – labour policy issues such as working conditions, job security or skills development usually take centre stage at the level of workplaces and companies; at the sectoral level, collective agreements on wages and working hours are negotiated; and at the national level, the focus is on legal frameworks and economic policy interests; regarding the trade unions, the latter have been discussed in Germany as their 'political mandate' (Lehndorff 2024).

3 Manufacturing and labour relations in transformation

3.1 Manufacturing in transformation

The three industries examined in this study are currently undergoing profound transitions driven by decarbonisation and digitalisation. The following section briefly outlines these transitions in each of the three industries. Particular attention is paid to the implications of decarbonisation and digitalisation for work and employment.

A key driver of the transition in the *automotive industry* is the shift from internal combustion engine (ICE) vehicles to battery electric vehicles (BEVs), strongly promoted by EU climate policy and increasingly stringent CO₂ emission standards (Dupuis et al. 2024; Lechowski and Weis 2025; Strötzel and Brunkhorst 2021). At the same time, digitalisation is closely intertwined with decarbonisation, constituting a 'twin transition' (Pulignano, Hauptmeier and Frans 2023; Tabares, Parida and Chirumalla 2025). BEVs are increasingly evolving into software-defined systems, whilst companies often orient their production strategies towards "Industry 4.0" (Krzywdzinski and Lechowski 2025).

The shift towards BEVs is expected to have substantial employment effects because electric vehicles require fewer components and less labour-intensive production processes; existing studies estimate that at least 180,000 jobs in Germany will be affected (e.g. Agora Verkehrswende 2021; Nationale Plattform Zukunft der Mobilität 2021). It also changes

skill requirements towards areas such as electrical engineering, battery technology and software. Digitalisation, by contrast, is expected to affect employment primarily by transforming tasks and occupational profiles rather than through large-scale job losses (Cacilo and Haag 2018) .

The energy-intensive *chemical industry* faces substantial pressure to decarbonise, particularly under the European Climate Law and the EU ETS (Heck, Delft and Leker 2024; Riedel 2024). Key technological pathways include the electrification of process heat, green hydrogen, CCUS/CCU, recycling, efficiency improvements and alternative feedstocks. At the same time, digitalisation is advancing through ‘Industry 4.0’, automation, AI and data-driven analytics (Daubenfeld, Hasselbach and Just 2025; Kockmann 2019).

The employment effects of decarbonisation are ambiguous: climate-neutral production can safeguard long-term competitiveness and employment, whilst high investment, energy and hydrogen costs may increase the risk of relocation and job losses (Hoch et al. 2019; Prognos 2019). Digitalisation is expected to have only moderate effects on employment due to the industry’s already high level of automation; it will primarily lead to changes in tasks and skill requirements, with greater potential for labour savings in administrative and knowledge-intensive activities (e.g. BMAS 2019; ILO 2022) .

Decarbonisation of the energy-intensive *steel industry* is likewise driven by the European Climate Law and the EU ETS (Harpprecht et al. 2022; König et al. 2026). The main technological pathway involves replacing coal-based blast furnaces with direct reduced iron (DRI) plants and electric arc furnaces (EAFs), ideally powered by green hydrogen (and gas until hydrogen becomes available). Digitalisation is simultaneously advancing through automation, AI and data-driven process control, although production remains less automated than in the chemical industry (Antonazzo, Stroud and Weinel 2024; Neef, Hirzel and Arens 2018).

The transition towards DRI and EAF production may lead to rationalisation and restructuring due to lower vertical integration, whilst at the same time being regarded as essential for securing the industry’s long-term competitiveness (Küster Simic and Schönfeldt 2022). Both decarbonisation and digitalisation are reshaping tasks and job profiles and increasing the demand for technological and digital skills.

Table 3 summarises the transitions and their effects in the three industries discussed above.

Table1 : Transitions in the automotive, chemical and steel industries

	Automotive industry	Chemical industry	Steel industry
(Main) Political Regulations	•European Climate Law •EU CO₂ emission standards for vehicle fleets	•European Climate Law •EU Emissions Trading System (EU ETS)	•European Climate Law •EU Emissions Trading System (EU ETS)

Technological changes	• From internal combustion engine vehicles (ICEVs) to battery electric vehicles (BEVs) • Software-defined cars	• Electrically heated steam crackers • Green hydrogen • CCUS and CCU • Recycling technologies • Automation and digital integration of production processes • AI and big data	• Direct reduced iron (DRI) plants • Electric arc furnaces (EAFs) • Green hydrogen • Automation and digital integration of production processes • AI and big data
Employment impacts	• Job losses and skills requirements resulting from decarbonisation • Job shifts and skills requirements due to digitalisation	• No direct job losses, but skills requirements arising from decarbonisation • Job shifts and skills requirements due to digitalisation	• Limited job losses, but significant skills requirements due to decarbonisation • Job shifts and skills requirements due to digitalisation

The transitions described above are contextualized by the multiple crises currently affecting German industry and the substantial declines in production, turnover and investment. The causes of this downturn are manifold. All three industries face a combination of comparatively high energy and raw material costs, persistent global overcapacity—particularly originating from China—and increasing restrictions on international trade. Moreover, the three industries are closely interconnected through their value chains. As a result, a decline in demand in the automotive industry leads to lower demand for products from the chemical and steel industries. Although the direct employment effects of decarbonisation and digitalisation are generally expected to be limited, their interaction with the current polycrisis has substantially intensified restructuring pressures across all three industries in Germany.

3.2 Background of labour relations

The manufacturing sector has long been a stronghold of the dual system of German labour relations, comprising collective bargaining at sectoral level and co-determination by works councils at workplace and company level. At the same time, it is the home of social partnership

At the same time, the manufacturing sector is the home of social and conflict partnership as the central model of industrial relations in Germany, characterised both by the mutual recognition of the parties involved and the legitimacy of their interests as well as by the search for common ground through compromise (Haipeter 2012; Kädtler 2012). Therefore, the relational pattern of social partnership in principle does not exclude labour

conflicts if these are based on recognition and leave room for compromises. Understood in the narrower sense as a peaceful and largely strike-free negotiation of compromises, it is found primarily in the chemical industry, where no strikes have taken place since the 1970s.

However, a number of changes of labour relations and regulations in this sector can be observed which, whilst incremental, are nonetheless far-reaching:

- The steady decline in collective bargaining coverage in individual industrial sectors, such as in the capital goods industry to around 50 per cent of the workforce (Hohendanner/Kohaut 2026);
- The establishment of ‘unbound employers’ associations’ (OT associations) by employers’ organisations, which in some regions now organise more companies – though, as they are mostly smaller, with fewer employees – than the employers’ organisations themselves (Syrovatka 2026);
- The ‘organised decentralisation’ (Traxler 1995) of sectoral collective bargaining agreements through opening clauses, which permit derogations from collective bargaining norms within workplaces and companies; in addition to concessions on wages or working hours, these agreements also include commitments by companies to safeguard employment and business locations, as well as, in an increasing number of cases, investments (Haipeter 2022);
- Workplace agreements to safeguard jobs and business locations as a response to the ‘whipsawing’ tactics employed by globalised firms in the form of threats of offshoring or outsourcing (Greer/Hauptmeier 2016).
- A more proactive approach by trade unions to support and mobilise works councils to address organisational transformations (Haipeter 2020).

These developments are forming the background for our analysis of the transformations and the way the actors cope with them in the three sectors under scrutiny. Following the Paris Climate Agreement and its transposition into national action plans, the German trade unions in industry as well as the business and employers’ associations have adopted a strategy of ‘eco-social partnership, which is based on two cornerstones: supporting climate targets on the one hand, and linking these to a strategy of green growth (Trappmann et al. 2024). With this strategy of ‘supporting’ a growth-oriented green transition (Thomas & Doerflinger 2020), the trade unions simultaneously articulated their aspiration to help shape the transition within companies in such a way that the change is fair. They therefore coupled their support with demands for an extension of works councils’ co-determination rights, greater fiscal leeway for the state, and an obligation for companies to adhere to collective agreements when receiving state support (Lehndorff 2024). The trade unions had already pursued this model of a ‘just transition’ in the context of digitalisation and the debate surrounding Industry 4.0 (Gerst 2023).

In the metalworking industry, at the collective bargaining level a particularly advanced regulatory mechanism has been agreed on: the ‘future collective bargaining agreements’, which were introduced into collective agreements in 2021 at the trade union’s insistence as an option for workplaces and companies. Under these agreements, the future

prospects of companies and locations are to be negotiated in detail. In doing so, they build on existing derogations, but with fewer concessions from workers (Geiger/Schaumburg, 2024).

Companies too – at least large firms and those that stand to benefit from green growth – as well as employers’ organisations accepted the climate policy objectives, albeit on condition that they are economically feasible and do not result in a loss of profits. This fairly fundamental consensus in support of the green transition could suggest cooperation on at least two levels of interest representation: on the one hand, at the level of sectoral policy, to influence the political framework conditions for green growth and ensure support for it; and on the other hand, by entering into modernisation partnerships with management within companies.

At the same time, however, trade union demands for greater co-determination by works councils are unlikely to be acceptable to employers, and conflicts could also arise over which transformation strategies companies develop, how employment can be safeguarded, whether training measures for employees will be funded, or how staff redeployment within the company or to other companies can be organised. These developments and their relationships with the current economic crisis will be analysed in the following sections.

4 Methods

To answer these questions, we developed a multilevel research design for the analysis of the automotive, chemical and steel industries. The empirical research consisted, on the one hand, of *case studies* (Pflüger, Pongratz and Trinczek 2017) conducted in 13 different companies across the three industries. The cases were selected and analysed in accordance with the structural characteristics of the industries. Whilst the German steel industry is relatively homogeneous in terms of products and production processes, the automotive and chemical industries are considerably more diverse in their industrial structures. Consequently, a ‘homogeneous sampling’ (Creswell and Guetterman 2020) strategy was adopted for the steel industry and a ‘maximal variation sampling’ for the two other industries. In total, six case studies were carried out in the automotive industry, four in the chemical industry, and three in the steel industry. The case studies included semi-structured interviews (Klemm and Liebold 2017) – totalling 97 – with works council members, management representatives, trade union officials, shop stewards, and employees (see Table 1). In addition, we analysed documents (Schmidt 2017), drawing on both publicly available documents and documents made available to the research team like company agreements. All interviews were audio-recorded and transcribed. The transcripts and the documents were analysed using structured qualitative content analysis (Mayring 2015) with the support of the MAXQDA software. The coding scheme was developed deductively prior to the analysis and was refined inductively throughout the analytical process by adding emerging codes. The interviews were then integrated into company case studies.

Table2 : Case studies and interviewees

	Works Council members	Management	Trade Union Officials	Shop stewards	Employees
Automotive industry					
Auto_1 Supplier (subsidiary) > 1,000 employees	4	-	1	-	-
Car_2 Supplier > 100,000 employees	3	-	1	2	-
Car_3 OEM > 100,000 units	2	1	1	1	-
Auto_4 Software (subsidiary) > 5,000 received	2	1	1	2	-
Auto_5 Supplier (subsidiary) < 1,000 employees	4	-	3	-	-
Auto_6 Engineering service provider > 1,000 employees	5	-	1	2	-
Chemical industry					
Chem_1 Nutritional supplements (subsidiary) > 1,000 employees	5	5	-	-	-
Chem_2 Chemical park operator > 5,000 employees	3	2	-	-	-
Chem_3 Tissue products < 5,000 recommendations	4	-	1	-	-
Chem_4 Plastics < 500 views	2	3	-	1	-
Steel industry					
Steel_1 Blast furnace route > 10,000 employees	3	2	1	1	-
Steel_2 Blast furnace route > 5,000 employees	3	1	1	4	-
Steel_3 Blast furnace route > 5,000 employees	5	4	1	3	5
Total	45	19	12	16	5

In addition to the company-level case studies, on the other hand, the analysis also covered the sectoral level. To this end, expert interviews were conducted with representatives of trade unions, employers' associations and industry associations (see Table 2). Furthermore, documents such as position papers and official statements were analysed.

Both the interviews and the documents were analysed using the same qualitative content analysis procedures as those applied to the case study data.

Table3 : Interviewees at the sectoral and collective bargaining level

	Trade Union	Employers' association	Industry association
Automotive industry	1	1	-
Chemical industry	2	2	-
Steel industry	1	1	1

5 Labour relations at the political level

A softening of demands and calls for more time for companies – a clear effect of the crisis

Table 3: Labour relations at the political level

	Automotive	Chemical	Steel
Labour Relations Industrial Policy	SP – Corporatism	SP – Corporatism (Transformation)	SP Corporatism (Transformation)
Output Industrial Policy	Dialogue, buyer's premium, battery technology, charging infrastructure	Action concept	Action concept

Automotive Industry

Steel industry

Chemical industry

6 Labour relations at the collective bargaining level

Table 4: Labour relations at the collective bargaining level

	Automotive	Chemical	Steel
Labour relations and collective bargaining	Conflicts over issues and decentralisation (modularisation, etc.)	Social partnership with new approaches: trade unions (membership bonuses)	Social partnership
Labour regulations and collective bargaining	Opening clause derogations Future collective bargaining	Job security	Flexibility in working hours Pay freeze

Automotive industry

Steel industry

Crisis-related pay rises: Crisis SP

Chemical industry

7 Labour relations at company and workplace level

The company and workplace level is central to addressing transformations in labour relations, as it is at this level that investment is made in new technologies, these technologies are implemented, and potential impacts on employment or other working conditions become apparent. Industrial policy aims to influence the legal framework and government economic and industrial policy affecting companies, and at the collective bargaining level, a number of framework provisions for dealing with transformations within workplaces have been introduced. The implementation of these frameworks, however, takes place within the companies and workplaces themselves.

The fundamental pattern of industrial relations with regard to these transformations at the company and workplace level is social partnership (Table 5). However, within this framework, the labour representatives in the automotive industry are significantly more conflict-oriented; this applies particularly in connection with staff reductions and restructuring, which are becoming increasingly common in companies within the sector. Not least due to developments in the automotive industry, the economic conditions are also poor in the other two sectors; however, partnership-based patterns are more firmly established here, partly because the restructuring measures are not as extensive as in automotive firms. In all sectors, concessionary bargaining is on the rise, and the stakeholders are negotiating social plans for staff reductions. In the steel industry, works councils have secured significant influence over the implementation of the transformations. In the automotive industry, the 'future agreements' have gone furthest in terms of potential avenues for influence, but these are increasingly being overshadowed and sidelined by the crisis.

Table 5: Labour relations at workplace and company level

	Automotive	Chemical	Steel
Labour Relations at Workplace Level	Mobilisation and conflict Conflictual partnership	Social partnership	Partnership in times of transformation and crisis
Labour regulations in the workplace	Future collective agreements Derogations Social plans	Derogations Social plans	Co-determination change process Derogations

7.1 Automotive

7.1.1 Safeguarding of jobs

In the automotive industry, the convergence of transformations and crises has led to a noticeable change in industrial relations; for the first time in a long while, the IG Metall

trade union has called for strikes in individual companies and mobilised workers, and tough and confrontational negotiations have taken place within the companies. However, the model of social partnership has not yet been abandoned, and the reasons for this lie primarily in the distribution and dynamics of power resources between the actors representing capital and labour.

Just a few years ago, the situation in the sector was different. The cornerstones of industrial relations were agreements on job security, which had been in place since the 2000s and 2010s – particularly in the sector’s large companies – and were repeatedly renewed. These were generally based on obliging companies or sites to cut costs, ruling out redundancies for a specific period, and making commitments to employee representatives regarding products and investments (Greer & Hauptmeier 2016). By the early 2020s, these employment commitments were mostly long-term in nature and ran until the second half of the decade.

At the same time, the works councils were able to secure influence over digitalisation. In many cases, they negotiated framework agreements with the companies regarding the introduction of digital technologies – particularly software – under which they can review the systems prior to implementation to ensure that they comply with data security regulations and that their applications do not allow for performance monitoring. Should any of these criteria not be met, the works councils can reject the introduction. To this end, the works councils have also set up special committees whose members specialised in the subject – thereby expanding their associational resources in terms of competencies.

Otherwise, digitalisation – like investment in general – has a rather positive connotation for works councils, as it drives the modernisation of business, thereby boosting competitiveness and ultimately safeguarding employment at German sites. This imperative for modernisation also applies to decarbonisation, at least where companies could expect it to open up new business areas and new markets that appeared set to secure their future viability – and thus their long-term competitiveness.

7.1.2 Future agreements

In this context, ‘future agreements’ gained in importance. At *Auto 3*, an initial ‘future agreement’ was concluded as early as 2018; it contained job cuts in production – due to reduced staffing requirements in the manufacture of engines and transmission components for EVs – but also promised an increase in employment in the company’s own software development. At the same time, a commitment was made to safeguard employment at the company’s German sites until the middle of the next decade. This agreement was subsequently updated a few years later, only to be terminated by the company in 2024.

A key catalyst for the further spread of this type of agreement amongst large companies in the sector was the inclusion of the ‘Future Agreement’ as an option for companies in the 2021 sectoral collective bargaining agreements. Whilst this did not impose any obligation on companies, it did lay the groundwork for works councils and trade unions to press more forcefully for negotiations on the matter.

Auto 1 provides an example of how these agreements are put into practice. Here a transformation collective agreement was negotiated at the parent company with the ‘vision-setting process’ as a key element, which is to be carried out at the sites. This process focuses on the strengths and weaknesses, as well as the sites’ technological position and competitiveness. From this, in turn, objectives and specific measures for the economic and strategic development of the sites are to be derived, both in terms of a medium-term outlook for the next three to five years and a longer-term outlook for the period up to 2030.

At *Auto 1*, this process was carried out in 2021 and 2022. A key feature of the process from the works council’s perspective was the close involvement of the workforce as a source of expertise. This was a demand made by the works council, which the company complied with.

“Yes, so here, in consensus with management, we involved the workforce, because ultimately they may well have the ideas, particularly regarding transformation, process improvement, and perhaps even new ideas for new products.” (Auto 1 Works Council Chair)

Over the course of a week, workshops were held in small groups organised by department, during which the key themes of the vision for the future were addressed. According to the works councils, the interests at stake in the negotiations were clearly defined; for the works councils, the focus was on securing the site and jobs, investment and skills development – linked to specific product commitments – whilst for the employer, the priority was on making staff deployment more flexible.

“Of course, the issue of job security was naturally very important to us. Employment, securing the site, investment, sustainability, staff training, and also establishing successors for products being phased out. Flexibility was, of course, a major issue for the employer.” (Auto 1 works council chair)

Accordingly, the works councils regarded it as a major success that the agreement ultimately enshrined existing products and product lines and guaranteed the production of successor products; that an average level of investment was set out in the agreement for the following four years; and that a ban on redundancies for economic reasons was also agreed for this period. Equally important are the site’s core competencies set out in the agreement with regard to innovation, technological leadership and process optimisation, which entail a role as a ‘lead plant’ for specific processes, functions and manufacturing operations within the group.

However, it also became apparent that, unlike at *Auto 1*, not all works councils focus their attention on the challenges posed by these transformations or, even if they do, possess the expertise to carry out such vision-setting processes themselves. IG Metall has therefore developed strategies to support and guide works councils in this regard, and has also built up the necessary resources for this purpose. One of the most advanced approaches in this regard is the ‘Team Transformation’ on the regional trade union level in the Baden-Württemberg collective bargaining district. Team Transformation has set itself the task of empowering works councils to scrutinise companies’ strategic decisions regarding

business areas, products, sites and employment, and to develop their own concepts on these issues, which can then be incorporated into the vision-setting processes.

“We realised that companies’ strategic decisions are being made earlier, and that is where we need to jump in. Particularly with regard to the question of what role individual sites play in this strategy and how they can be transformed.” (Secretary, IG Metall District)

To this end, the team has developed a concept for strategy workshops – beginning with a ‘future check’ – in which it discusses with works councils the strategies companies are pursuing, the specific impacts these transformations may have on the sites, and the organisational, product and technological strategies that can safeguard the sites and employment whilst consolidating the plants’ leading-edge functions and operational excellence. To this end, the team is collaborating with a trade union-affiliated management consultancy that focuses on the economic viability of the alternative proposals.

These activities aim to build up associational power resources – in the form of the works councils’ expertise and strategic capabilities – in negotiations on future agreements. The associated involvement of employees can, at the same time, enhance the legitimacy of works councils amongst the workforce, which is crucial for these elected bodies representing employees’ interests.

7.1.3 Future agreements under pressure

However, these processes are increasingly being overshadowed by the unfolding crises and the associated corporate restructuring programmes. A good example of this is *Auto 2*, a large, globally operating automotive group. Here, on the basis of a ‘Future Agreement’, target scenarios and associated job security measures were initially agreed upon in many plants. Then, in 2024, the company’s management announced job cuts affecting 14,000 employees at its German sites. This was accompanied by the management’s decision not to renew the ‘Future Agreement’ for the company, which had expired at that point. At the same time, the company made it clear that investments would now be prioritised in ‘best-cost countries’, i.e. primarily in Central and Eastern Europe.

IG Metall subsequently organised warning strikes at many German sites. However, this neither prevented the planned job cuts nor led to a new ‘Future Agreement’ being reached. Nevertheless, pressure from the General Works Council and IG Metall resulted not only in a well-resourced social plan for the job cuts, but also in a new ‘soundigboard process’ being agreed as a company agreement. The central cornerstone of this approach is the establishment of a pool for at-risk sites. These are sites involved in both production and research and development that fall short of the company’s central financial target, namely a factory contribution margin of 10 per cent.

The key task of the employee representatives is now to develop, promote and attempt to implement strategies at these sites that are sustainable and meet the company’s profitability criteria. However, unlike under the previous ‘Transformation’ collective agreement, this is taking place without employment protection serving as a safeguard for the workforce; and if this approach fails, the sites face imminent closure. The fact that an

agreement of this kind could be concluded at all was down to the organisational power of the works council and IG Metall – more specifically, their ability to mobilise employees.

‘If I were to tell every site right now that, the moment you end up on this list, you must fight against it immediately by any means necessary, then that would work quite well. And of course the employer shied away from that and then asked, ‘How can we turn this into a joint effort?’” (Auto 2 general works council)

In practice, management sets performance targets for the individual sites. It is then up to the works councils to put forward their own proposals for achieving these targets. These proposals are developed at the sites themselves. The approach most commonly taken is to reduce costs through derogations from the collective bargaining agreements and concessions on wages or working hours, thereby meeting the profitability targets – provided that, in return, investments are approved and products are localised accordingly. In this way, investments are ‘bought’ by the employees or, to put it another way, co-financed by them.

“Our employees are putting money on the table; the company is building this production line here rather than abroad; and then we can compete again. And in this way, we are effectively buying ourselves a future.” (Auto 2 General Works Council)

It is true, then, that the associational power resources of the employee representative bodies formed the basis for agreeing on a new process to secure the future. However, this process is not only associated with far greater uncertainties regarding safeguarding of jobs and sites, but also with considerable concessions on the part of the employees. This demonstrates that the distribution of power resources between capital and labour has shifted significantly in favour of the company, even at the corporate level. The reason for this, in turn, is the weakening of employees’ structural power due to two factors: the crisis and staff cuts in many companies within the sector, and the serious threat that investments would henceforth be made solely on the basis of cost criteria and primarily abroad.

Consequently, as was also the case in companies *Auto 3*, *Auto 4* and *Auto 5*, the basis of the social partnership compromise between capital and labour – which had still characterised the ‘future agreements’ – has been abandoned: namely, that job security and the long-term viability of the sites can be achieved through increases in productivity and technological innovations and within the standards set out in the collective bargaining agreements. These standards are now being sacrificed by the workers’ side in the name of job security, and this is no longer merely a one-off occurrence but a general response to the shifts in power within the industry.

7.2 Steel

7.2.1 Digitalisation and rationalisation

In the steel industry too – with its highly unionised workforces, strong works councils and the expanded co-determination of employee representatives on the supervisory board – digitalisation and decarbonisation are key issues in industrial relations at the level of workplaces and companies. Investment in digitalisation is taking place primarily in white-collar sectors. As in the automotive industry, dealing with digitalisation is routine

nowadays. Agreements have been concluded within the companies that regulate the implementation processes and guarantee works councils a right to co-determination; the works councils have, through specialised committees, built up the organisational resources and expertise to assess digital systems in terms of their impact on performance monitoring and data protection, and to demand training measures where necessary. The processes at *Stahl 1* serve as an example of this:

‘There are regular consultations with the company on IT matters, whether these involve legislation that needs to be implemented or new systems that are to be introduced. And we try to bring issues such as performance monitoring, anonymity, data protection, data security and so on to the fore. We have a good dialogue and, in fact, adopt most of the works agreements on these matters, because IT issues are those with the most regulatory provisions.’ (Stahl 1, works council)

For employee representatives, ensuring that staff have the appropriate skills is of fundamental importance in the context of digitalisation. In this regard, works councils are calling on employers to provide suitable retraining and further training programmes. The second key issue in dealing with digitalisation is rationalisation in white-collar areas. The works councils support the rationalisation targets because these can help to improve the company’s financial position. At Steel 3, for example, management has set itself the target of reducing staff costs in administrative departments by 20 per cent by 2027. The works council shares this objective, particularly as it helps to address demographic trends and potential skills shortages.

“Anything that helps us move faster and work better at the moment – we have to play that card... If we can work faster and more efficiently in administration, then we must do so. How we go about it is another matter, but we have to do it.” (Works Council Member 1, Steel 1)

7.2.2 Investments and regulations

The key economic challenge from the works councils’ perspective is the financing of the new technology for producing carbon-free steel. The more traditional blast furnaces that need to be replaced by DRI, the higher the investment costs. It is clear to all stakeholders that these costs cannot be borne by the steel companies alone, as profits in the sector are too low for that. The situation varies from company to company: at Steel 3, the transformation is already fully funded, as only one blast furnace needs to be replaced; in the other two cases, however, only the first stage is being upgraded – at Steel 1, this involves just one of four blast furnaces.

In all cases, this funding was supported to a large extent by the German Federal Government, provided in all instances in 2023 and 2024. This was preceded in each case by strong political campaigning by the companies, and in particular by the works councils. The works councils are all strong supporters of the green transition because they want to preserve the companies and jobs; and decarbonisation is the only way to achieve this, as the EU ETS will make steel production unprofitable from the mid-2030s onwards. They also have the employees on their side in this regard.

“But we’ve agreed that if we don’t do this, our steelworks will simply cease to exist at some point; we’ll have to shut down, and because there’s simply no way out, the staff naturally support this.” (Steel 2 works council)

The works councils advocate this conviction both internally – towards management – and externally towards policymakers. In the case companies, there is broad consensus between works councils and management that there is no alternative to the transition to carbon-neutral technologies and that the entire production capacity, including all blast furnaces, should be converted. The exception to this is *Stahl 1*, where funding has only been secured for one of the company’s four blast furnaces. Here, the works councils suspect that the company management no longer wishes to operate parts of the crude steel production in Germany, but instead intends to either produce the crude steel abroad or purchase it from there. This has sparked an intense conflict that continues to this day.

“You can be sure that the board members are dealing with such scenarios every day and are increasingly moving in this direction. And we are trying to counter this by saying: no dependencies; politics – you must carry on; sort out the industrial electricity price; ensure we get a better supply, a secure supply of green hydrogen, and so on and so forth.” (Stahl 1, Chair of the General Works Council)

The implementation processes for new technologies – ranging from new buildings and installations to skills development measures – are overseen in each of the case companies by joint committees comprising works council members and management. At *Stahl 1*, for example, the works council members’ participation in this committee serves to proactively identify problems and then reach agreements with the employer, such as on technology-driven changes in job roles and the associated skills development measures. The works councils have also each set up their own committees to deal with transformation issues, thereby building up new expertise.

7.2.3 Crises and derogations

Beyond individual controversies, management and works councils in all these cases are sending a unified message to policymakers: to provide financial support for the technological transition, to ensure competitive electricity prices, to establish green lead markets through product market regulations, and to create infrastructure for electricity and hydrogen. However, these initiatives were unable to prevent the companies’ economic situation from deteriorating significantly in recent years, due to weak demand from the automotive industry, low-cost competition on global markets and relatively high electricity prices in Germany. Consequently, deviations from the collective agreement were agreed in two of the three companies – *Steel 1* and *Steel 3* – with *Steel 1* even seeing a substantial job cut, accompanied by a redundancy scheme. At *Steel 3*, the main issue was the introduction of additional shifts without compensatory pay, whilst working hours were simultaneously reduced to 32 hours in accordance with the collective agreement – again without compensatory pay.

These developments can be attributed to a shift in – structural – power resources brought about by the economic crisis and the costs of transformation. However, unlike in the

automotive industry, they did not lead to an increase in conflicts; the pattern of social partnership between management and works councils continues to exist. This takes the form of a crisis and transformation partnership; management and works councils are working in close collaboration to weather the current crisis and overcome the challenges of transformation.

A key difference between the sectors lies in management strategies. The predominant strategy of intensified offshoring associated with restructuring in the automotive industry has not yet been observed in the steel industry – with the exception of Steel 1. Management is more location-bound; economic success is to be achieved in Germany. This is also why – again with the exception of Steel 1 – there are no major staff cuts taking place within the companies. Consequently, the redistribution of power resources is less dramatic than in the automotive industry, given similar starting conditions, and this is also why it is easier for employee representatives to maintain the consensus based on social partnership.

7.3 Chemical Industry

7.3.1 Digitalisation

In the chemical industry, a social partnership approach between the parties within the workplace has traditionally prevailed. Even major upheavals – such as the financialisation of management, which has now become typical of the chemical industry, and the acquisitions and disposals of company divisions frequently associated with this, numerous spin-offs or the accelerated globalisation of companies (Kädtler 2006) – have failed to alter this in the past, even though these developments had significantly shifted the balance of power to the detriment of employee representatives. In this situation, their main interest was usually to negotiate as safeguards for the workforce. In the case of spin-offs, for example, works councils have generally agreements in which job security and collective bargaining coverage for the new company were guaranteed for an extended period.

A similar pattern can be observed with regard to digitalisation. In the context of digitalisation – as in the other two sectors – works councils focus on monitoring new systems with regard to data protection and data security, as well as on potential performance monitoring using digital data. To this end, works agreements are typically concluded with management, and the works councils have set up IT committees to address the issue of building up the workforce and specialised knowledge as resources for action and power. This is also the case at *Chemie 1*, a subsidiary of a major chemical group. The work of the IT committee is characterised by the implementation of the group's framework agreement on the introduction of IT systems; no separate works agreements are negotiated.

“Naturally, we ensure that data protection is upheld and that employees are not subject to surveillance; alternatively, the software is designed to regulate who has access to the data, who is authorised to submit requests, and how analyses are carried out – or indeed whether any analyses are carried out at all. All of this is then discussed with us; we finalise the details and submit a draft resolution to the works council, which then makes the decision.” (Chemie 1 IT Works Council)

Digital technologies are always introduced with the aim of streamlining operations, an objective that works councils support because it improves cost-effectiveness. Their main focus is on ensuring that this does not lead to redundancies for operational reasons and that employees receive appropriate training. Demographic trends also support this view from the perspective of management, according to a cluster manager from the Chemicals 1 division.

“Of course, we also have a limited workforce; we are facing demographic change, which means there will be a shift in the future because many of the older employees are currently retiring... That is one of the challenges... So the aim is simply to free up staff for more value-adding activities.” (Chemistry 1 Management Cluster Head)

7.3.2 Decarbonisation

Although decarbonisation is a relevant topic, concrete activities in the form of investments are rare. The majority of measures relate to improving resource efficiency. Companies have long been practising this; resource efficiency has been a focus for businesses for decades. In Chemical 1, resource efficiency as a form of incremental decarbonisation is underpinned by annual targets to be implemented across the various divisions. The aim here is to identify efficiency gains and thereby continuously reduce energy consumption. This is not an end in itself, but is undertaken because it saves on energy costs and thus represents an important economic factor for the company. The more improvements one has already achieved, the more difficult it becomes to make further ones.

“You just have to ensure that you go a little further each year. The improvements then become smaller. We really have to leave no stone unturned. That’s one area where we can improve by one per cent. That’s our goal, every year.” (Chemie 1 Management)

Efforts towards decarbonisation are already more advanced at *Chemistry 2*. The reason for this is that *Chemistry 2* is an operating company for chemical parks, providing the companies based there with a shared logistical and technological infrastructure that enables them to network their processes. This also includes energy supply and the interconnection of energy flows. From the works council’s perspective, there is therefore no alternative to decarbonisation, as CO₂ emissions are becoming increasingly uneconomical. In this context, the works council has agreed to a staff reduction programme aimed at cutting costs; the aim is to save 100 million euros over the next few years, primarily through the socially responsible reduction – supported by a social plan including a redundancy scheme – of 500 of the company’s nearly 5,000 jobs. The money saved is earmarked for future investments:

“We will save around 100 million euros from our own resources within our own company in order to invest this money in heat pump technology, perhaps even solar installations, and in automation and digitalisation processes” (Chemie 2, Works Council)

At the same time, a ‘future agreement’ is currently being negotiated, in which, at the works council’s insistence, further investment commitments are to be set out; however, this is likely to come at the cost of the existing job security provisions being significantly watered down.

“The Works Council Chair is already in talks with our CFO about this. The exclusion of redundancies for operational reasons has been slightly reworded to: ‘This should be avoided wherever possible.’ So, let’s put it this way: a proper exclusion criterion – that no longer exists in our company today.” (Chemie 2, Works Council)

This pattern of exchange between the works council and management is familiar from the automotive industry: investments are tied to cost reductions achieved through concessions, be it deviations from collective agreements – which also exist at Chemicals 2 – or staff cuts. The financial resources thus freed up are then invested – in effect, the employees are paying for the investments.

7.3.3 Restructuring

In the chemical industry, it is above all the scenario of restructuring and reluctance of the companies to invest that weakens the structural power of employee representatives and forces them to make concessions. At the same time, however, the pattern of social partnership is not called into question. Unlike in the steel industry, however, it is not a ‘crisis partnership’ with the long-term goal of decarbonisation, but rather an orderly defensive strategy in an era of accelerated globalisation with one central aim: to save as many jobs as possible.

This is also evident in restructuring processes at other case companies. At *Chemie 1*, following a directive from the parent company, almost 10 per cent of the workforce at the site is to be made redundant, not least due to the outsourcing of customer service to a separate company based abroad. The works council of the parent company had refused to accept separate collective bargaining agreements with lower labour standards for such a company. The works council at Chemical 3 was then left with no option but to negotiate a redundancy plan with management, which was obliged to implement the directives from group headquarters. Both parties within the organisation had limited structural power in this situation, and the works councils had little choice but to do as much as possible for the affected employees during the implementation process.

“We were then given a list of the posts affected and went through virtually every department with the line managers from the negotiating team. In other words, every manager was invited and then, as it were, described what would happen to that post.” (Chemie 1, works council)

8 Discussion

The transformations – digital, and even more so ecological – are accompanied by fundamental shifts in the dynamics of industrial relations within German industry. This is primarily because transformations and economic crisis are intertwined. This applies in particular to decarbonisation in the automotive and steel sectors. In both sectors, decarbonisation entails high investment costs for companies, and in both sectors the markets for green products have not yet become sufficiently established to allow profits to be generated from these products. In the automotive industry, capacity has already been built up that cannot be utilised to full capacity.

At the same time, there is now a lack of political impetus for establishing green markets and promoting green investment; such impetus existed a few years ago in the form of investment support for the steel industry and purchase subsidies for BEVs, but these programmes are no longer being continued – or are only being continued in a reduced form. The EU's current tariffs certainly help the steel industry, which is, however, simultaneously suffering from US tariffs; the latter also applies to the automotive and chemical industries.

In the chemical industry, the green transition is currently the least advanced; there, the focus is on greater competitive and cost pressures and the associated restructuring. Of course – least of all in the steel industry – this also involves meeting minimum return targets even in difficult economic circumstances. In all sectors, digitalisation is being specifically deployed as a strategy for cost reduction and workforce redundancies. This also applies to the strategy of accelerated relocation to 'best-cost' countries, which is particularly evident in the automotive industry, but also in the chemical industry, and which is being used to drive 'whipsawing' and intense competition between locations.

Crises, restructuring and 'whipsawing', in turn, are shifting the balance of power between capital and labour in German industry. The structural power of trade unions and works councils is waning. Although endowed with considerable associational and institutional power within the industrial sectors, employee representatives have found themselves on a new kind of defensive footing, in which they are primarily seeking to secure employment and preserve German production sites. However, unlike in the past, job security is now significantly qualified, as in many cases it is linked to staff cuts and redundancy schemes.

At the same time, employees are increasingly having to make concessions in order to secure investment in their sites. Employees are thus increasingly becoming investors, without, however, having investor rights or being recognised as such. Proactive efforts to extend co-determination to economic issues – such as future collective agreements in the automotive industry – are still evident to some extent, but are increasingly linked to concessions and are thus transforming into the familiar derogations from collective bargaining agreements.

Linked to the loss of power by workers' representatives is the gain in power by companies, which have been able to significantly expand their range of options precisely because of the economic situation. Investment is increasingly driven by market opportunities and labour costs, and the ties to German sites – and thus also to skilled German workers with their structural power – are becoming less and less important. The strategy of retaining skilled workers, which was still successfully practised during the financial crisis and which then ushered in the long period of growth in the 2010s (Haipeter 2012), is over – and with it the increase in power that employee representatives had experienced at that time.

From the employers' perspective, this also means that the influence of employers' organisations is waning, as companies are increasingly able to reduce labour costs themselves. Of course, moderate wage settlements in collective bargaining agreements are welcomed by companies. However, it is the large companies in particular that are achieving the actual cost reductions through concessions and staff cuts. In doing so, they also

create the conditions whereby trade unions do not make high wage demands in collective bargaining and do not call on their members to take industrial action – which is rare in the industrial sector anyway.

In this situation, the trade unions clearly lack a narrative of their own with which they could exert discursive power. In the face of staff cuts, relocation pressure and concession bargaining, the progressive guiding principles of digital modernisation and the just transition no longer seem relevant. Digital modernisation increasingly means rationalisation, and the ecological transition – not least in the face of only lukewarm political support – is heading more than ever towards an uncertain outcome. The priority seems to be to weather the current crisis as unscathed as possible for employees, in the hope that better times will return afterwards. For this reason, trade unions are currently supporting demands from industry associations to relax and extend the CO₂ emission targets slightly, in order to give companies greater financial leeway. However, this in turn can – as in the steel industry – also divide the business community, because it penalises pioneering companies and rewards those lagging behind in the transition to sustainability.

Despite mobilisations against job cuts in the automotive industry, there are currently no signs of a shift towards a conflict-based strategy on the part of the trade unions in any of the three sectors. Consequently, social partnership remains the defining mode of industrial relations in German industry even during the current crisis phase, and the strategy of cross-class coalition is maintained in sectoral and industrial policy. However, the balance of power and the focus within this relationship pattern have shifted: in the face of job losses and offshoring, the worker representatives have lost structural power resources, and, in relative terms, employers have consequently gained power. The winners, however, are not the employers' associations, but the companies themselves, which can now put pressure on trade unions and works councils and force them to make concessions.

That said, there are certainly differences between sectors. In the steel industry, social partnership has taken on the character of a crisis and transformation partnership. A crisis partnership, because capital and labour agree that the current crisis must be overcome; and a transformation partnership, because both sides agree on the long-term goal of ecological transformation. In the chemical industry, social partnership is an alliance for preservation and transformation, aimed at maintaining German sites as far as possible and modernising them in an environmentally friendly way, although the transformation is not yet so strongly evident within the companies themselves. Finally, in the automotive industry, social partnership is a 'conflict partnership', in which the conflicts now originate from the companies that were – and remain – in a position to break the old compromise on job security without being met with the other side calling social partnership in question.

9 Summary and Outlook

The development of industrial relations in German industry in the age of transformation provides ample illustrative material for the central role played by power resources in

industrial relations. This applies both to their dynamics and to their relational nature and articulation.

The *dynamics* of power resources within the sectors are shaped to a certain extent by exogenous factors: on the one hand, politics, which steers the ecological transition through climate targets but does little to provide the necessary infrastructure, support for business and the development of green markets; on the other hand, the economic crisis, fuelled by high energy prices, tariffs or other restrictions on liberal global trade. In times of crisis, workers' representatives can no longer exert their structural power and are therefore unable to deploy their associational and institutional power resources effectively.

However, endogenous factors also play a role. This is because companies – particularly in the automotive industry, but also in the chemical industry – have capitalised on the situation and, through strategies of staff cuts and offshoring, have been able to significantly increase their structural power resources; as a result, they are currently on the offensive and the workers' representatives are on the defensive. The dynamics of power relations are thus – at least during the crisis – *relational* in the sense of a zero-sum game. A gain in power for one side entails a loss of power for the other. Only in the steel industry do power relations remain more or less constant, because companies here largely refrain from redundancies and relocations.

This, in turn, has implications for the *articulation* of power resources between the levels of action within these power relations. The level of companies and workplaces is gaining in significance as a level of action, because companies are increasingly succeeding in shaping working conditions here according to their wishes through concessions. Consequently, the collective bargaining level is losing significance as a sphere of action, particularly as the trade unions, due to the crisis, are not making high wage demands and are also prepared to make concessions here. Finally, at the level of sectoral and industrial policy, there appear to be hardly any changes; mutual interests and cross-class coalitions continue to prevail here. However, shifts are also becoming apparent here, as evidenced by the fact that the trade unions, together with the companies, are calling for a relaxation of climate regulations and are thus, if not abandoning, then at least postponing the goal of the green transition. Here, too, this reflects the growing influence of companies that see their economic objectives under threat.

Our findings should be explored in greater depth in future research in several respects. Firstly, within the scope of our research, we were unable to accurately map the interests, preferences and orientations of employees and could only draw conclusions based on the interpretations of the interest groups. Consequently, however, the important aspect of the legitimacy of both the actions of employee representatives and those of companies remains largely unaddressed. Legitimacy, however, is an important resource for both actors: for employee representatives as the basis for organising and mobilising employees, and for companies as the basis for employee motivation. Secondly, the scope of the study should be broadened to include more cases, so that a more systematic distinction can be made between company sizes or the position of companies within value chains. Finally,

the analysis requires ongoing updating, as the dynamics of power relations are currently extremely fluid.

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