Management whipsawing:

The staging of labor competition under globalization

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Abstract

This paper examines management whipsawing practices in the European auto industry based on more than 200 interviews and a comparison of three auto makers.[1] We identify four distinct ways in which managers stage competition between plants to extract labor concessions: informal, hegemonic, coercive, and rule-based whipsawing. Practices at the three examined auto firms vary and change, we find, due to two factors: structural whipsawing capacity and management labor relations strategy. In the context of economic globalization whipsawing is an effective means for managers to extract concessions, to loosen national institutional constraints, and to diffuse employment practices internationally.

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Since the 1970s production and exchange have increasingly taken place on a global scale, facilitated by market liberalization and foreign direct investment by multinational corporations (MNCs). It is well known that economic globalization has reshaped collective bargaining by intensifying market pressures on firms and workers (Tilly 1995), and that management practices within MNCs translate these pressures into changes in firm-level employment relations (e.g. Katz 1985; Moody 1997; Mueller and Purcell 1992; Raess 2014). Less is known, however, about the role of management in organizing international competition.

In this article we discuss whipsawing as a technique for managers to extract labor concessions using between-plant competition. Whipsawing is usually understood as a negotiation practice in which one negotiator plays off at least two other parties against each other to gain an advantage (Graham, Evenko, and Rajan 1992). While previous employment relations literature has referred to whipsawing in situations when there was a direct contest between two plants over production (Turner 1991, Katz 1993), we use the term whipsawing in a wider sense. We examine it as a way in which managers ‘stage’ market competition (Brinkmann 2011) across the corporate network in the context of production and investment decisions. The various forms of management whipsawing deserve attention in employment relations research, because they help managers to reduce the constraining effects of national institutions and diffuse employment relations practices internationally.

We examine MNCs in the European auto industry, from the emergence of widespread management whipsawing in the mid-1980s up to the economic crisis in 2008. We focus on Europe because it is a world-region where some of the most sophisticated whipsawing practices have developed. We examine the American companies General Motors (GM) and Ford, which developed whipsawing techniques in the USA (Katz 1985; Moody 1997) and introduced them afterward in Europe (Fetzer 2012; Mueller and Purcell 1992). We also examine the German MNC Volkswagen (VW), the largest automaker in Europe, where management behavior differs due to various within-firm institutions conducive to labor-management partnership (Greer and Hauptmeier 2008; Turner 1991), but where nonetheless we observe whipsawing.

This article's first contribution is to distinguish between four whipsawing patterns. Informal whipsawing is the staging of competition using labor's understanding that concessions are necessary for investment, but without explicit or specific threats. Coercive whipsawing is the use of such threats, with a narrow focus on extracting concessions and little attempt to secure worker representatives' cooperation. In the two other patterns, managers also organize competition, but try to maintain partnership by influencing labor's interests and ideas (hegemonic whipsawing) or using standardized formal bidding (rule-based whipsawing).

This article's second contribution is to identify two factors that explain the observed emergence of, and variation in, whipsawing practice. First, the production structures of MNCs and market conditions provide management with varying and changing degrees of whipsawing capacity. The overall increase in flexibility to reallocate production to different plants allows whipsawing to emerge and develop. Second, within these constraints, management pursues diverse labor relations strategies. Competition is organized in varying ways in response to the simultaneous and conflicting needs to secure partnership with, and to force concessions from, organized labor.

The changing conditions and practices of whipsawing

In industrial relations the term whipsawing originally referred to union rather than management behavior. It has been defined as 'a bargaining tactic used by trade unions in which there is an attempt to spread wage and other concessions from one employer to another . . . A breakthrough in negotiations in a lead firm (could) thereby be generalized across an industry or occupational group' (Heery and Noon 2008: 510).

Labor unions used whipsawing historically to establish pattern bargaining. Based on the US experience of the 1930s and 1940s, Ross (1948: 53-70) points to equalizing tendencies under collective bargaining, driven by various 'orbits of coercive comparisons', e.g. labor and product markets. In the post-war decades, union whipsawing took place regularly across the developed world, as unions ratcheted up wages in a context of strong economic growth (Marginson 1988; Markovits 1986). Auto manufacturing was an important site of union whipsawing. In the post-New Deal US and postwar UK, unions would target a particular company and then demand that other companies pay according to the new pattern. In the US, the union had the advantage that during a long strike at one company, workers at the other companies would continue paying into the strike fund; deviation between companies (and within companies) was minor (Katz 1985). Similarly, in the UK, Ford workers established a 'parity campaign' to bring wages up to the level of British Leyland; subsequently Ford was seen by unions as the company that set standards for the sector (Beynon 1973). In postwar Germany, where formal sectoral bargaining encompassed the entire metal sector, IG Metall would first seek agreement in its Baden-Württemberg district, due to the highly organized workforce. This agreement would then be extended to other metalworking regions and would also influence bargaining in other sectors (Markovits 1986).

Employers also engaged in comparisons between plants, as early as the 1970s. For example, Ford conducted performance comparisons of its European plants (Beynon 1973), pointing to the productivity gap between British and continental European plants and criticizing the regular strikes and wildcat disputes in the UK (Fetzer 2009: 16). However, management's comparisons did not have a strong effect on employment relations, since they took place in a context of growth in demand, high plant capacity utilization, international trade barriers, and therefore little scope for relocating production. As recently as 1976, even in the US, 'union whipsawing [was] much more prevalent than the reverse phenomenon' (Hendricks 1976: 78).

With economic globalization, the union strike threat lost its potency as managers gained credible exit options and increased their capacity to whipsaw (Anner, Greer, Hauptmeier, Lillie, and Winchester 2006; Raess 2014). Governments gradually opened product markets to international producers. Internationalization had a strong regional dimension, especially in the European Union, which promoted a wide range of market-making institutional changes over several decades, including the free flow of goods, services, labor, and capital (Lillie 2010; Höpner and Schäfer 2009). The internationalization of markets made it easier for MNCs to trade across borders and invest outside of their home countries.

Changing market conditions also put pressures on firms. With slowing economic growth after the 1970s and increasing international competition, markets for automobiles became saturated (Bonin, Lung, and Tolliday 2003). By the 1990s excessive production capacity became a serious problem, as underutilized plants squeezed profits or triggered losses, putting jobs at risk. For trade unionists, the tradeoff between jobs and pay became acute, making them more sensitive to production assignments and investments and therefore susceptible to demands for concessions.

Parallel to the internationalization of markets, globalization altered MNC organization, structure, and strategy (Morgan, Kristensen, and Whitley 2001). Facing increased market competition, the two main objectives for MNCs in the auto industry became cost reduction and increased product variety (Bordenave and Lung 1996). Foreign direct investments by MNCs accelerated in the 1970s and 1980s, and MNC operations became integrated across borders. Global manufacturing systems stipulated work organization and production norms in plants around the world (Williams and Geppert 2012). Management gradually developed transnational production networks and production platforms with standardized production templates in multiple plants in different countries. Different models on a platform shared the majority of parts, driving down the cost of parts, but differed in terms of outside appearance (Jürgens 1998). Some corporate strategies, such as parts purchase and manufacturing systems unfolded on a global level, while production platforms were embedded within world regions (Freyssenet and Lung 2000).

The evolving internationalization of production facilitated management whipsawing. In one early incident in the US management threatened to purchase new axles from another plant unless the local union would agree to concessions. The unions, under pressure to retain local jobs, agreed to work rule changes including the broadening of job classifications (Katz 1985: 66-68). In the second half of the 1980s, whipsawing became widespread at US assembly plants. Turner (1991) documents within-country whipsawing to force work rule changes on local unions to promote lean production. Plants that did not cooperate were passed over in investment decisions, threatened with closure, or closed down. Although this did not initially break the wage pattern, it did decentralize collective bargaining over work rules (Katz 1993).

Management also began to whipsaw plants across borders (Moody 1997). Babson (2000) observed dual sourcing at Ford plants in the US and Mexico, in which labor concessions were extracted by playing off plants from both sides of the border. Ford and GM also experimented more widely and forcefully with whipsawing practices in Europe, in the 1980s by pitching German and British car parts plants against each other (Mueller and Purcell 1992) and later by employing this strategy throughout their European corporate networks (Fetzer 2012, Hancke 2000). From the 1990s other European auto multinationals followed suit (Meardi 2000, Bernaciak 2010, Greer and Hauptmeier 2008).

The industrial relations literature identifies a number of different management practices associated with whipsawing. First, managers engage in benchmarking, the systematic measurement and comparison of processes and performance across plants (Sisson, Arrowsmith, and Marginson 2003). This can be merely an exercise in data gathering, but can also have a more normative or coercive meaning if combined with other whipsawing practices. Second, management organizes competition between plants by pitching them against each other in the context of production assignments (Mueller and Purcell 1992) and demanding labor concessions in exchange for investment. Third, there are differences in how managers stage this competition. In some cases managers articulate an explicit and specific threat to shift production if labor does not agree to concessions (Babson 2000; Raess 2006; Raess and Burgoon 2006); in other instances management does not say this openly (Coller 1996). Fourth, managers introduce formal bidding for new production with clear rules and expectations about the competitive assignment of investment and production (Greer and Hauptmeier 2008). Plants with a better tender, often including higher labor concessions, win the contest. Fifth, corporate leaders seek to legitimize their action by *influencing workers' ideas* (Ferner and Edwards 1995, Hauptmeier and Heery 2014, Hauptmeier 2012). For example, managers try to convince workers that the competitive assignment of production is necessary for survival in highly competitive auto markets. By reference to these different whipsawing practices we distinguish between the four observed whipsawing patterns (table 1) discussed in the next section.

Table 1 about here

Mapping Variation and Change in Whipsawing Patterns

Whipsawing is one way in which managers stage markets and use the resulting competition as a tool for coordination and control (Brinkmann 2011, Vidal 2013). Managers engaging in whipsawing are not only responding to the pressures of markets; they are also organizing market competition through their investment and production decisions, with an aim of extracting labor concessions. The emergence and variation in whipsawing that we observe is a function of both whipsawing capacities and management labor relations strategies.

Whipsawing capacity refers to the potential and ease with which MNCs move production between plants (see table 2). Parallel and standardized production increases the speed and reduces the cost of reallocating production at the end of production cycles. Production platforms further increase the flexibility to assign production and allow to shift production at short notice at any time during the product cycle. Production can be more easily reallocated between plants when plant utilization is low. Companies tend to experience low plant utilization and a corresponding profit squeeze or losses when market demand deteriorates and excess supply increases. This increases pressures and opportunities for whipsawing and reinforces management arguments for concessions.

Table 2 about here

Within these constraints, whipsawing practice is shaped by management's labor relations strategy, which we conceptualize as a balancing act between forcing and partnership (Walton, Cutcher-Gershenfeld, and McKersie 2000). Forcing is the use of the unilateral managerial prerogative to extract concessions, and is always to some degree present due to needs for reduced costs and increased productivity. Partnership is also always to some extent present due to the need to secure worker consent, improve quality, and maintain stability. These two requirements are often in conflict with one another, for example, when forcing undermines labor-management partnership. But they can also complement each other, for example, under 'productivity coalitions' (Windolf 1989), when local labor-management partnership facilitates concessions in the face of European-level management forcing strategies. We differentiates between four different degrees in our sample: emphasis on forcing (when management uses boldly its power to extract concessions), emphasis on partnership (when management focuses on gaining productivity gains through collaboration with labor), simultaneous forcing and partnership (when management strikes a balance between both approaches) and strong partnership (when management integrates labor in decision-making processes).[2] The varying management strategies and whipsawing capacities result in the following whipsawing patterns.

Informal whipsawing is a type of whipsawing where management does not explicitly threaten labor with the withdrawal or withholding of production (Coller 1996). However, management might still communicate to labor in an informal manner that production allocations are coming up within the company. Since production may go to another plant, these discussions

[2] Another possibility is 'strong forcing', in which management ramps up its whipsawing activities by breaking the union in one or more locations. While union busting is well documented internationally, we did not observe such 'strong forcing' in our whipsawing cases.

trigger labor concerns, especially in the context of excess capacity and underutilized plants. Subsequent negotiations between management and labor result in an exchange of labor concessions for production. Managers have an emphasis on partnership and avoid undermining existing labor-management collaborations. While managers may lack the intention or capacity to move production elsewhere – and we observe informal whipsawing most commonly under medium whipsawing capacity – it is difficult for worker representatives to assess this, even with statutory rights to access corporate information.

Coercive whipsawing, by contrast, is explicit and specific. There remains no doubt about the intentions of management or its capacity to follow through on disinvestment threats. Management sets different plants in competition to each other, threatening the affected workforces with the assignment of car production to another plant if labor does not agree to sufficient concessions. In some instances, management only negotiates one round of concessions at each plant and subsequently assigns production; in others, management uses concessions at one plant to extract increasing concessions at other plants. This back-and-forth between plants is what the literal meaning of whipsawing suggests. The correspondence between the extent of labor concessions and production assignments is often unclear. Because management prerogative is exercised blatantly and unilaterally, coercive whipsawing has the greatest potential to undermine labor-management partnership.

Rule-based whipsawing is a standardized competitive procedure for the allocation of production and requires a high whipsawing capacity. By introducing rules and seeking to organize the process in a fair and transparent manner, managers try to avoid the potential negative effects of coercive whipsawing and maintain labor-management cooperation, but simultaneously try to extract concessions. Before production of a new car model begins, management initiates a formal bidding process between the plants of a given production platform. Each plant submits a tender, and the one with the highest labor concessions receives the highest share of the work or exclusive production of a model. In effect, management creates a within-company market for the allocation of production (Hauptmeier 2011).

Hegemonic whipsawing only occurs where labor is extensively integrated into management decision making processes. Giving labor real responsibility in governing the company tends to produce a ‘responsible’ labor ideology, which facilitates management attempts to convince labor that internal competition is necessary to survive in the context of cut-throat price-based product competition. Management also argues that the competitive assignment of production will help to secure jobs and production assignments from headquarters. Thus, management influences worker representatives’ ideas to win their acceptance for the competitive assignment of new production. This allows the extraction of labor concessions using explicit exit threats without undercutting management’s legitimacy in the workplace.

There must be at least a medium level of whipsawing capacity for there to be whipsawing of any kind, and only under high capacity do we see sophisticated rule-based and hegemonic forms of whipsawing. At any particular level of whipsawing capacity, however, managers organize whipsawing in varying ways, depending on the mix of partnership and forcing found in their labor relations strategies.

Methods and Data

We examine the European auto industry, because it is here that whipsawing practices have become common and varied. We use qualitative data on the European operations of Ford, GM and VW. Data collection took place between 2002 and 2010 and included more than 200 interviews. We interviewed auto managers at European and global headquarters and at the local plant level in the USA, Germany and Spain. We triangulated this data on management by interviewing actors with a distinct perspective such as works councils, labor representatives, dissidents (activists outside formal labor representation bodies), industry experts and European Works Councils (EWCs) representatives from the United Kingdom (UK), Belgium, Poland, Sweden, Russia, Germany and Spain. As the recollection of interviewees of historical events can be incomplete or biased, we also relied on archival data such as corporate newsletters, press releases and magazines as well as leaflet archives of labor unions, which helped to reconstruct what the actors thought and motivated at the respective moments in time. Further information were gathered from web pages and newspapers. The company case studies cover the period from the mid-1980s to the 2008 economic crisis, allowing us to assess sequences of whipsawing episodes and therefore change over time. The episodes have a focus on assembly production, but also include parts plants where they shed light on the development of whipsawing practices in the firm as a whole. In each case we explored different patterns of whipsawing practices and corresponding explanatory factors. The emerging whipsawing categories and explanatory factors from the data were subsequently developed and consolidated in relation to previous literature on labor competition, corporate strategies and MNCs.

Ford

At Ford, following incidents of coercive whipsawing in the 1980s, informal whipsawing became the dominant pattern. Management usually refrained from coercive whipsawing practices with the aim of avoiding conflict with labor and nurturing cooperation. Management made labor aware of upcoming production decisions within Europe, and trade unionists initiated negotiations over production allocation, which then led to labor concessions. Management only turned to coercive whipsawing when it faced local industrial action in Spain, but subsequently returned to a more informal approach and aimed to maintain collaborative employment relations, which it regarded as a precondition for producing high-quality cars.

Ford was one of the first MNCs to develop an integrated European operation. Ford of Europe was founded in 1967 with headquarters in Warley, Essex (UK). Henceforth, the European headquarters oversaw the two primary, previously independent, subsidiaries in Germany and the UK. Ford Germany had its main production sites in Cologne and a plant in Genk, Belgium, which was also part of the German operation. Ford UK's assembly plants were located in Halewood, Dagenham and Southampton. In addition, Ford owned an assembly plant in Azambuja (Portugal). Ford's European headquarters orchestrated the expansion of production in Europe in the 1970s by building assembly plants in Saarlouis (Germany) and Valencia (Spain) (Fetzer 2012).

In the 1980s, Ford experimented more widely with whipsawing practices in the context of excess production capacities in Europe (Bonin, Lung, and Tolliday 2003: 94). In 1985, Ford cited high labor costs in Germany as an important factor in a possible relocation of engine production to the UK. German works councilors only averted disinvestment by negotiating a cost reduction agreement with local management (Fetzer 2009:19).

In the late 1980s, management put the Dagenham plant on notice, presenting productivity comparisons that showed the plant lagging behind its European competitors. It took 59 hours to assemble a Fiesta in Dagenham, while it took 33 hours in Cologne and 35 hours in Valencia. In addition, it required 67 hours to produce the Sierra in Dagenham in comparison to 40 hours in Genk (Bonin, Lung, and Tolliday 2003: 101). As a consequence, Ford concentrated Sierra production in Genk, and management warned the Dagenham unions that the successor model, the Mondeo, would be also sourced to the Genk plant if labor conflict and productivity did not improve. Parallel production in different plants made such coercive whipsawing practices possible.

Ford's whipsawing capacity increased in Europe during the 1990s, when it expanded production by creating an assembly joint-venture with VW in Setubal (Portugal) and opening assembly plants in Plonsk (Poland) and Obchuk (Belarus). The Valencia factory became the 'flex plant' capable of producing all Ford car models, and thus could easily take on additional production when market conditions required (union interview, Spain, 26.4.2006). The standardization and integration of production was advanced through the development of production platforms (implemented in the second half of the 1990s), which increased management's flexibility to reassign production.

Despite this capacity, Ford mostly relied on informal whipsawing in this period. In the context of implementing lean production, management valued partnership with worker representatives and regarded it as an important element of running their plants productively (management interview, Germany, 16.11.2005). Ford did not want to endanger labor-management partnership through excessive forcing strategies. Whipsawing began to work in a more subtle way. For example, when Ford Germany was hit by the 1993 recession, management sought to negotiate a company-level agreement to cope with the crisis and reduce labor costs. Management put pressure on the works council by presenting benchmarking data, demonstrating that each car produced was 516 US dollars cheaper in Valencia, but did not explicitly threaten to shift production elsewhere (Ford Works Council 1993).

It was the head of the German works council, Wilfried Kuckelkorn, who demanded production assignments for the German plants in return for concessions. He realized that in an increasingly tight product market only sufficient production assignments would secure jobs and previous labor gains. The resulting 'Investment Security Agreement' stipulated production assignment for the German plants until 2000 and an annual labor cost reduction of 140 million German marks (works council interview, Germany, 24.6.2005).

Similar negotiations took place in 1997. German works councilors were made aware by management that new production assignments were imminent. In a meeting with the worldwide CEO of Ford, Kuckelkorn demanded production assignments and signaled that he would be willing to negotiate labor concessions. This initial conversation triggered negotiations at Ford Germany that resulted in another agreement that traded off labor concessions for production assignments in Germany until 2002 (Ford 1997). This assignment had severe consequences for the British unions during the next downtown of the market, at the end of the 1990s. Ford was under pressure to reduce production capacity. Since production was already promised to German plants, Ford decided to shut down car production at Dagenham, which meant discontinuing 'blue oval' car production in the UK after more than 80 years.

At the Valencia plant in Spain whipsawing practices only began to matter for employment relations in the late 1990s. Whipsawing arrived relatively late because the Valencia plant was one of the most productive assembly plants in Europe and had operated in the growing Spanish auto market. However, management became concerned with growing labor costs, which led to a bitter eleven-month collective bargaining conflict in 1998. Management responded to union strike pressure by threatening to transfer Focus production from Valencia to Saarlouis (Artiles 2002b). However, German works councilors refused extra work to break the strike in

Spain. In subsequent negotiations, headquarters in Detroit got directly involved in the conflict via a video-conference. The CEO urged the Spanish unions to agree to the suggested changes and called the trade unionists ‘pirates.’ He threatened to close the Valencia plant, not right away, but gradually through the assignment of new production elsewhere (Hauptmeier 2012).

Shortly thereafter, management and labor agreed on a compromise. After reflecting on the negotiation process, management decided that all future production assignments would only take place following a collective bargaining round, and not before as had happened in 1998. Management’s view was that this would increase pressure on labor to find a reasonable compromise in negotiations (management interview, Spain, 15.5.2006).

At the end of the 1990s, Ford Europe’s economic problems intensified. Ford made significant losses in 1999, in part due to overcapacity, and launched an unprecedented retrenchment program in Europe with the aims of saving one billion dollars annually and matching production capacity with sales (Automotive Intelligence News 2000). Besides the above-mentioned termination of car production at Dagenham, Ford sold the Azambuja plant (Portugal) to GM, closed the Plonsk plant (Poland), sold its share of a joint-venture in Setubal (Portugal) and stopped car production in Obchuk (Belarus), but also opened new assembly plants in St. Petersburg (Russia) and Kocaeli (Turkey). The outcome was a significantly changed manufacturing footprint with car production concentrated in fewer locations.

In the 2000s, the primary competition for new car production took place between German, Belgian and Spanish plants. For example, in 2006, the German works council worked to secure long-term production guarantees and investments by offering far-reaching concessions, including the introduction of a lower-tier collective bargaining agreement and a wage cut to the level of the sectoral collective bargaining agreement. In return, the Cologne and Saarlouis plants secured production assignments until 2011 (Ford Works Council 2006).

Concerned that these production assignments would make their jobs vulnerable, Spanish unions forcefully demanded production assignments. Labor representatives from the Valencia plants traveled twice to the European headquarters in Cologne and demanded production assignments from the CEO of Ford Europe (union interview, Spain, 27.4.2006). Initially management was reluctant due to the difficulties of predicting future production levels, but it eventually negotiated. Because Valencia was a flex plant, management agreed to production levels rather than specific products. In return, labor agreed to concessions.

Labor initiated negotiations in both Germany and Spain, with the intention of exchanging concessions for production assignments in the face of saturated product markets and production overcapacity. The pattern of informal whipsawing thus remained dominant.

General Motors

At GM whipsawing practices progressed from informal to coercive whipsawing and then to formal bidding. Initially, GM management used productivity comparisons and informal whipsawing to extract concessions, and then with a greater maturity of its production platforms and the expansion of its European production network, pitted plants directly against each other in competition to extract concessions. In response to local-level labor conflicts and increasing transnational worker cooperation within the EWC, management sought to increase the legitimacy of whipsawing by introducing a formal bidding process for the allocation of production in 2003.

GM initially owned two independent subsidiaries in Europe: the British car producer Vauxhall with assembly in Ellesmere Port and Luton and the German car producer Opel with assembly in Rüsselsheim, Bochum, and Antwerp, Belgium. GM sought to keep the two brand identities distinct by maintaining separate product development, design and engineering (Fetzer 2012: 54-55).

GM began to integrate and expand European production in the 1980s. It set up a European headquarters in Zurich in 1986 and then opened an engine and transmission plant in Vienna, an assembly plant in Saragossa, and a parts plant in France; extended the assembly plant in Antwerp; and bought the Swedish car company SAAB (Greer and Hauptmeier 2012). Parallel production became common, with the Ascona range produced in Rüsselsheim, Luton, and Antwerp; Corsa-based models produced in Ellesmere Port, Saragossa and Bochum; and engines manufactured in Vienna, Bochum and Kaiserslautern (Fetzer 2012: 56).

At the end of the 1980s, management began to experiment with whipsawing and used competition between plants over production as leverage to pursue changes in labor relations and work organization (Mueller and Purcell 1992:20). This was informal whipsawing, since there was no explicit threat to shift production to another plant. In return for production allocation, the Saragossa plant was the first in Europe that agreed to round-the-clock production. Previously, three shifts a day had been regarded as physically too demanding. Similarly, the components plant in Kaiserslautern agreed to extended machine running times and working time flexibility in return for investments. This agreement was a departure from previous employment relations practices in Germany, since such significant working time changes had previously determined in sectoral bargaining (ibid.).

GM's whipsawing capacity increased during the 1990s with the construction of assembly plants in Eisenach (Germany) and Gliwice (Poland) and an engine plant in Hungary. As in other parts of the world, GM Europe introduced its global manufacturing system, which defined common production standards, norms and practices (Laudon and Laudon 2011); implementation was audited by a benchmarking team that regularly assessed the progress of different plants (interview member benchmarking team, USA, 23.3.2004). GM standardized further by introducing production platforms, which were fully implemented by the late 1990s.

These changes gave management more flexibility to shift production between plants, which it increasingly used to whipsaw plants and extract concessions. For example, during the 1993 recession in the European auto market, management published benchmarking data in the Opel company newsletters, showing that the German plants had the highest labor costs and lowest annual working time of any GM plant worldwide (Opel Post 1993), but did not explicitly threaten labor to shift production to another plant. Later, management unilaterally cancelled three collective agreements on social benefits, an unprecedented move at Opel. The works council sought to fight off concessions and pointed to the previously solid profits at the German plants. In the context of the recession, however, labor was under pressure to trade concessions for an employment protection clause that prohibited forced redundancies (Rehder 2003).

In 1995 management pitched the Rüsselsheim, Antwerp and Luton plants against each other in the context of the Vectra allocation. In the negotiations with German works councilors, management pointed again to the high labor costs in Germany. Labor agreed to a ‘working time corridor’ that allowed weekly working time to alter between 31 and 38.75 hours, depending on market conditions (Opel Works Council 1995) in exchange for a share of the Vectra production. After concluding negotiations in Germany, GM approached the Antwerp and Luton plant, pointing to the productivity improvements in Germany. Management made the case to the Belgian and British unionists that they also had to reduce their costs, if they also wanted a portion of the Vectra production. As both plants urgently needed further production, they agreed to labor concessions in return for a share of the Vectra production (works council interview, Germany, 1.11.2005). Management repeated the same type of coercive whipsawing in 1998. Again, management negotiated concessions at the German plants in exchange for production and investments then used this agreement to extract concessions from the Belgian and British plants (interview with Belgian unionist, EWC meeting, 4.7.2005).

Management's whipsawing practices led to tensions between labor representatives in GM's EWC. The British labor representatives felt that the German unionists had negotiated behind their back and at the expense of other European plants. Accusations flew within the EWC, but the labor representatives also realized that the fierce whipsawing practices by management were ultimately responsible for the bouts of concessions bargaining in Europe in the 1990s (Kotthoff 2006). They responded by intensifying their transnational work in the EWC (Greer and Hauptmeier 2012).

The Saragossa plant was not initially strongly affected by whipsawing due to its production of the Corsa, GM's best-selling car in Europe. However, as the balance sheet of the plant deteriorated at the end of the 1990s, it needed a second car model to utilize the entire production capacity. Management offered Meriva production to Saragossa in exchange for concessions and productivity improvements; otherwise the new model would be assigned to the Gliwice plant in Poland (Hauptmeier 2012). The ensuing labor-management negotiations traded a reduction in labor costs for the assignment of the Meriva model to the Saragossa plant.

In 2000, coercive whipsawing practices led to worker protests. The Bochum plant experienced wildcat strikes in protest of feared job losses in the context of the Fiat-GM joint venture. A conflict that year at the Luton plant had wider ramifications. The local strike action of the British unions was supported by the EWC, which organized a transnational work stoppage in which 40,000 workers across Europe participated (Herber and Schäfer-Klug 2002). Management extracted concessions with its forcing and whipsawing practices, but also undermined cooperation with labor.

Management therefore tried to make whipsawing practices fairer and more transparent. GM introduced a bidding process for the allocation of production for plants producing on the same platform in 2003. Plants interested in new production had to submit a bid, which laid out cost savings and labor concessions. Management would assess bids based on labor costs and productivity comparisons. The plant that won the tender would receive either the entire production of a new car models or a higher share of production than competing plants. In effect, management created a within company market for the allocation of production.

Management regarded this as a fair and just process and compared it with the many markets that exist in advanced economies and help societies to efficiently allocate goods and services (management interviews, USA headquarters, 22.3.2004). The introduction of a formal bidding process was thus intended to increase the legitimacy of whipsawing within GM. However, worker representatives were not convinced and regarded the formal bidding process as yet another forcing strategy by management to extract labor concessions (works council interview, Germany, 26.5.2005).

In 2004, GM offered the Zafira model to the Gliwice and Rüsselsheim plants in a bidding contest. While both offered concessions, management argued each car was 350 euros cheaper to produce in Poland. This was a major blow for the German worker representatives, as production was only at 70% of capacity and the Rüsselsheim plant urgently needed another product (works council interview, Germany, 3.5.2005). In 2005, management whipsawed the Saragossa and Gliwice plants over the new Meriva model. In this case, competitive pressures increased when the bidding process became public in Saragossa. Management provided the local newspapers with the benchmarking data of the two plants. The local public anxiously followed the outcome due to the importance of the GM plant for the local economy. Ultimately, the Spanish unions won after agreeing to concessions (UGT GM 2005). A further bidding process took place between Rüsselsheim and Trollhättan in 2005. Management assessed the total production costs as 200 million euros cheaper in Rüsselsheim, and the plant received the new Vectra (works council interviews, Germany, 18.4.2005).

In another round of tendering, GM pitched the plants of the Delta platform against each other. European management asked the plants in Ellesmere Port, Antwerp, Bochum, Trollhätten, and Gliwice to submit bids for Astra production. The EWC sought to counter this transnational whipsawing through intensified transnational worker cooperation and demanded that management negotiate jointly a fair and egalitarian distribution of production that would allow all plants to survive. Supported by the European Metal Workers Federation, the EWC founded the Delta Group in which worker representatives at each plant signed a ‘solidarity pledge’ stipulating that no plant would engage in individual negotiations with management and underbid other plants (Bartmann and Blum-Geenen 2006).

Management interpreted the Delta Group as a ‘declaration of war’ and gross interference with the right to manage (management interview, GM Europe Headquarters, 29.5.2005). The explicit goal of management became to break the common labor negotiation block, which was achieved through a secret deal with the Bochum works council. Management’s effort to secure legitimacy through rule-based whipsawing was not notably successful, although it did divide the workforce and lead to further labor concessions.

Volkswagen

VW was a late adopter of whipsawing and initially used informal whipsawing, which evolved into a pattern of hegemonic whipsawing. Management's attempts to convince labor that whipsawing was necessary were successful, and labor representatives believed that the competitive assignment of production would help the plants to stay productive and defend jobs. However, VW periodically resorted to coercive whipsawing practices when faced with an intransigent local workforce.

VW's European operations are concentrated in Germany, with headquarters in Wolfsburg. VW began expanding in Europe in the 1970s by building a plant in Belgium in 1971 and in Yugoslavia in 1972, by taking over the Spanish auto company SEAT in the 1980s and the Czech company Škoda in 1991 and by engaging in a joint venture with Ford in Portugal in 1995. Despite a long tradition of labor-management partnership, labor representatives became concerned with increasing labor competition within Europe in the late 1980s, which spurred the foundation of one of the first EWCs in 1992 and a World Works Council (WWC) in 1999.

Whipsawing at VW only emerged in the 1990s. A recession of the European auto market began in 1992, and when it became apparent that VW was drifting towards crisis, the supervisory board appointed a new CEO, Ferdinand Piëch, who was tasked to restructure VW. He implemented production platforms from 1993, which cut across the brands Škoda, VW, Audi and SEAT (Jürgens 1998; Piëch 2002), and ended production in SEAT's assembly plant in Barcelona.

In addition, management sought to tackle labor costs. Workers in Germany were only able to avoid redundancies through agreeing to far-reaching working time reduction and flexibility. As part of the drive to reduce labor costs, management considered the assignment of the production of a new model, the Lupo, to the VW Pamplona plant in Spain in 1995 (Haipeter 2000). Previously, all new VW car models had been initially produced in Germany and then only assigned to foreign plants later in the product cycle. In order to avoid the assignment to a foreign plant, labor in Germany agreed to labor concessions, amongst them further working time flexibility measures. Given the contentious labor relations at VW's Pamplona plant, however, it was unclear whether management seriously intended to assign the new car there.

By the late 1990s, however, the standardization of production and the development of platforms gave VW more flexibility to shift car production and to assign new car models to different plants. In 1999, VW management assigned the new car model Touareg, a small SUV, to the Bratislava plant. This showed that VW management was serious about taking advantage of lower foreign labor costs and that foreign plants were up to the task of rolling out high-end car models (interview industry expert, Germany, 19.5.2005).

VW also introduced a bidding process for the sourcing of parts in 1999, which pitted internal suppliers against external competitors, by allowing both to submit tenders. If an external supplier offered to produce at lower costs, the internal VW supplier had the chance for a final bid to undercut the external supplier. This process radically reduced the labor costs at VW parts plants in Germany. This formal bidding process was introduced with the consent of labor. Management collaborated closely with works councilors on the supervisory board and actively sought to convince labor of their assessment of the auto market (management interview, Germany, 15.12.2005). Ultimately, management and labor agreed that VW's plants faced cut-throat competition in the parts sector, and the bidding process helped to make the internal suppliers more competitive. Labor representatives preferred concessions over permanent outsourcing, which they observed had happened at GM and Ford and were realistic alternatives (works council interviews, Germany, 19.7.2007; union interview, Germany, 12.6.2007).

In the early 2000s, management approached labor representatives in Germany about the production of a new model, the Touran. Management made clear that this would only happen in Germany if labor agreed to a separate, lower collective bargaining agreement and proposed what would become the '5000 x 5000 project': 5000 new jobs at 5000 German marks per month (about 2,500 euros), roughly 20% below the wage level of the collective bargaining agreement. Management sought to frame the project in a positive manner by emphasizing that the new jobs would go to the unemployed, and that the project served to secure industrial jobs in Germany (Schumann, Kuhlmann, Sanders, and Sperling 2006).

Initially, worker representatives rejected the proposal, since it would have broken the collective bargaining pattern at VW for the first time. The protracted negotiation between management and labor received considerable attention from politicians and the news media. The tabloid press depicted IG Metall as a 'job killer'. Throughout the negotiations, management suggested that production could go to foreign plant if labor would not agree to concessions. The conflict was only resolved after the German chancellor, Gerhard Schröder, intervened (management interview, Germany, 15.12.2005). Under mounting pressure, labor agreed to 5000 x 5000, which created a lower-tier collective bargaining agreement in exchange for production allocation to Wolfsburg.

In 2002, VW management used the increasing flexibility in their European production network to whipsaw the SEAT plant in Martorell, near Barcelona (Hauptmeier 2012). In contrast to the German plants, which had already agreed to far-reaching working time flexibility during the 1990s, Spanish unions fiercely resisted working time flexibility, which they regarded as an important trade union gain. During collective bargaining in 2002, management threatened to transfer production to the VW plant in Bratislava (Slovakia). When labor once again refused to make concessions, management made good on its threat and transferred 10% of the Ibiza car production, the flagship model of the Matorell plant, to Slovakia (Artiles 2002a). This was a shock for the unions, and production of the Ibiza returned only two years later to Spain after unions agreed to more working time flexibility.

During the next downturn of the European car market, labor in Germany was also under pressure to secure sufficient car production. In 2004, IG Metall agreed to a lower tier collective agreement, which applied to all newly employed workers. Like the 5000 x 5000 project, all newly employed workers earned about 20% less than the core workforce. In return for these concessions, labor secured production assignments to German assembly and parts plants (IG Metall 2004).

In 2005, management pitted plants more directly against each other. The VW brand had hired Wolfgang Bernhard as a new Chief Executive Officer. As president of Chrysler in the US, he had overseen its restructuring as part of DaimlerChrysler. Bernhard announced that the production of the Tiguan would either go to Hannover (Germany) or Setubal (Portugal). Production was allocated to the German plant after the works council agreed to concessions. Bernhard also initiated the first competition between two German assembly plants: C-Coupe car production was offered to both the Emden and Mosel plants and won by the former (works council interview, Germany, 8.12.2005, Germany, 2005).

These concessions were due to union consent rather than union weakness. Membership density was above 95%, and unlike German companies covered by sectoral collective bargaining, labor had the right to strike at the company level. Labor representatives tolerated whipsawing because they shared management's view of a highly competitive product market, in which the survival of the company was at stake. Whipsawing would make the plants more competitive and therefore help to secure jobs (works council interview, Germany, 19.7.2005).

VW management pursued a two-pronged strategy to convince labor. First, management pursued close cooperation with labor, not only within the German labor relations institutions, but also in the EWC and WWC. The VW management took the EWC and WWC meetings seriously, with the CEO present at the meetings (a practice rarely seen in other EWCs). Here, management presented company information, including benchmarking data, to labor representatives, with an aim of convincing labor of the need to increase productivity and stay competitive (works council interview, Germany, 16.12.2005; management interview, Spain, 16.3.2006; union interview, Spain, 23.3.2006).

The second element of management's ideological work was based on excessive compensation of labor representatives, which was partly illegal. In 2005, it became public that VW had paid extremely high salaries to key labor representatives. The chairman of the WWC, EWC and German works council, Klaus Volkert, received an annual income of 350,000 euros and bonuses worth more than two million euros between 1995 and 2005 (Hartz and Kloepfer 2007). In addition, an assistant HR manager organized brothel visits for labor representatives in the context of EWC and WWC meetings and flew in prostitutes from Brazil to Germany for Volkert. After the revelation, plant-level labor representatives expressed in interviews that this special treatment explained some of Volkert's concessions to management and his acceptance of bidding contests between suppliers (union interview 2006, works council interviews 2005). While this may suggest that Volkert had been bribed, the bribery charge was not upheld in a German court; however, he and the highest HR manager were convicted of embezzlement.

Volkert's successor was more critical of management practices, as can be seen in a communiqué of the WWC in 2006, which criticized whipsawing practices and reminded management of their obligations towards their workers (VW 2006). However, whipsawing persisted. For example, in 2007, VW offered the Spanish unions the Berlina model. After labor agreed to concessions, management assigned the car production to SEAT's Martorell plant. Management's effort to reinforce labor-management partnership by influencing workers' ideas has thus survived the scandal and resulting turnover of works council leadership.

Comparative Assessment

Above, we described the variation and change in our sample over three decades. We examined whipsawing practice and two explanatory factors: whipsawing capacity (see table 2) and management labor relations strategy. Table 3 presents a comparison of the cases over this period along these variables, disaggregated by whipsawing episode.

Table 3 about here

Neither factor is sufficient for explaining the variation or change in whipsawing practice. For example, we observed informal whipsawing under conditions of medium whipsawing capacity at GM during the late 1980s and early 1990s and at Ford throughout the 1990s, i.e. where it was not always clear that management could follow through on relocation threats. Against a backdrop of high whipsawing capacity since the mid-1990s – i.e. where management clearly could follow through on relocation threats – we observed varying and changing whipsawing patterns. GM switched from coercive to rule-based whipsawing, and VW switched from informal to coercive to hegemonic whipsawing. Furthermore, the dominant pattern at Ford after the 1980s remained informal whipsawing despite an increase in whipsawing capacity.

Whipsawing capacity, however, is an important enabling factor. We do not observe it at VW during the 1980s or at GM prior to 1986, where production was idiosyncratic, not interchangeable across the multinational production network, and where the market was not yet saturated. Only where whipsawing capacity is medium to high do we observe whipsawing at all, and increases in whipsawing capacity enabled greater sophistication. While we observe informal and coercive whipsawing where whipsawing capacity is high or medium (all three companies after the early 1990s), we only witness hegemonic or rule-based whipsawing where whipsawing capacity is high (GM and VW after 2004, VW parts plants after 1999).

Labor relations strategies also help to explain why, despite the overall increase in whipsawing capacity, whipsawing practice continued to vary. At VW, hegemonic whipsawing became dominant after a period of coercive whipsawing. Management engaged in ideological work and spent considerable effort to align the interests of the social partners by organizing cooperation forums at the local, national and transnational levels (EWC, WWC). At Ford, management sought to protect its partnership with labor, on which its transition to lean production was premised, by switching in the 1990s from coercive to informal whipsawing. Management did, however, use coercive whipsawing when faced with local strikes. GM management during the 1990s was less concerned with its relationship with labor and more focused on reducing costs through the extraction of labor concessions using coercive whipsawing. When this caused strikes, management tried after 2003 to increase the legitimacy of whipsawing through a formal bidding process.

Further factors that have influenced whipsawing practices beyond the two emphasized above include the following. In some cases union behavior mattered, for example, GM management introduce rule based whipsawing following transnational labor protest and Ford responded to local strike action in Spain by using coercive whipsawing practices. However, in most of the whipsawing episodes, union behavior did not have a significant impact on management whipsawing. In addition, the varying exposure to financial markets mattered in some whipsawing episodes. For example, GM faced a shareholder revolt in the early 1990s, which could explain the switch to more aggressive whipsawing; and the more muted whipsawing practices at VW at the time might be related to its relative insulation from financial markets. However, this would not explain the changes in whipsawing practices at GM and VW in the late 1990s and 2000s, since exposure to financial markets did not change significantly at these companies.

Conclusion

While economic globalization increased competitive pressures similarly across all three companies, management developed varying whipsawing practices in response. This paper explains the emergence of, and differences between, whipsawing patterns through different management labor relations strategies and whipsawing capacities.

The various forms of whipsawing are important for employment relations research because they are important tools for management engineering change in employment relations, spreading work practices throughout global corporate networks and loosening the constraints associated with national institutions. Management in the auto industry could, for example, push through alien concepts such as multi-tier wage structures in Germany, working-time flexibility in Spain, and implement the principles and norms of global manufacturing systems across borders.

The extent of whipsawing in other sectors and world-regions remains an open question. Taken separately, the practices discussed above – the international integration and standardization of production, underpinned by benchmarking, capital mobility, and the search for labor concessions – are far from unique to the European auto sector. The same goes for the problems of saturated markets and production overcapacities. Future research examining how and why market competition is staged differently in other contexts could therefore uncover additional patterns of whipsawing.

How will management whipsawing in the auto industry develop in the future? On the one hand, automakers might become content with wages, social benefits and working conditions once they reach a low level, and then institutionalize them using multi-employer bargaining. This would provide stability and protect firms from union whipsawing in the event of an increase in workers' collective power. Alternatively, and this seems more likely, management could develop whipsawing on a global scale. During the period of our study, international whipsawing took place at the scale of the world-region, such as Europe or North America, and relocation of production between continents was constrained by varying quality standards, trade barriers, and transportation costs. This is changing, however, due to the continuing global integration of markets and production platforms. Under these conditions, management could pitch plants from South America and Asia against those in North America and Europe in global contests for production and investment.

References

Anner, Mark, Ian Greer, Marco Hauptmeier, Nathan Lillie, and Nik Winchester. 2006. The Industrial Determinants of Transnational Solidarity: Global Interunion Politics in Three Sectors. European Journal of Industrial Relations, 12(1): 7-27.

Artiles, Antonio Martin. 2002a. Seat Moves 10% of Ibiza Production to Slovakia. EIROonline, Accessed at http://www.eurofound.europa.eu/eiro/2002/10/feature/es0210204f.htm.

Artiles, Antonio Martín. 2002b. Ford Spain. Case Study on Pacts for Employment and Competitiveness. Accessed at http://www.eurofound.europa.eu/areas/industrialrelations/pecs/pdf/french/pecs_ford_spain.pdf.

Automotive Intelligence News. 2000. Major restructuring for Ford in Europe. 16 May.

Babson, Steve. 2000. Dual Sourcing at Ford in the United States and Mexico: Implications for Labor Relations & Union Strategies. Working paper. Detroit: Wayne State University.

Bartmann, Martin, and Sabine Blum-Geenen. 2006. The Challenge of the ‘Solidarity Pledge. Mitbestimmung, August: 37–40.

Bernaciak, Magdalena. 2010. Cross-border Competition and Trade Union Responses in the Enlarged EU: Evidence from the Automotive Industry in Germany and Poland. European Journal of Industrial Relations, 16(2): 119-135.

Bordenave, Gérard and Yannick Lung. 1996. New Spatial Configurations in the European Automobile Industry. European Urban and Regional Studies 3(4):305-21.

Brinkmann, Ulrich. 2011. Die unsichtbare Faust. Betriebliche Kontrolle und Koordination in Finanzmarketkapitalismus. Berlin: Edition Sigma.

Beynon, Huw. 1973. Working for Ford. London: Allen Lane.

Bonin, Hubert, Yannick Lung, and Steven Tolliday. 2003. Ford, 1903-2003: The European History. Paris: P.L.A.G.E.

Coller, Xavier. 1996. Managing Flexibility in the Food Industry: A Cross-National Comparative Case Study in European Multinational Companies. European Journal of Industrial Relations 2(2): 153-72.

Ferner, Anthony and Paul Edwards. 1995. Power and the diffusion of organizational change within multinational enterprises. European Journal of Industrial Relations, 1(2): 229-257.

Fetzer, Thomas. 2009. Beyond Convergence Versus Path Dependence: The Internationalization of Industrial Relations at Ford Germany and Britain (1967–1985). Working paper. Cologne: Max Planck Institute for the Study of Societies.

Fetzer, Thomas. 2012. Paradoxes of Internationalization: British and German Trade Unions at Ford and General Motors, 1967-2000. Manchester: Manchester University Press.

Ford. 1997. Betriebsvereinbarung. Sicherung von Investitionen innerhalb der Ford Werke AG. Collective Agreement. May 5, 1997.

Ford Works Council. 1993. BR Information. Hände weg vom Sozialplan. Works council leaflet. February.

Ford Works Council. 2006. BR Information. Geschafft – Standortsicherung abgeschlossen. Works council leaflet. February.

Freyssenet, Michel and Yannick Lung. 2000. Betweeen Globalization and Regionalization: What Is the Future of the Auto Industry. In John Humphrey, Yveline Lecler and Mario Sergio Salerno (Eds.) Global Strategies and Local Realities: The Auto Industry in Emerging Markets, pp. 72-94. New York: St Martin's Press.

Graham, John, Leonid Evenko, and Mahesh Rajan. 1992. An Empirical Comparison of Soviet and American Business Negotiations. Journal of International Business Studies, 23(3): 387-418.

Greer, Ian and Marco Hauptmeier. 2008. Political Entrepreneurs and Co-Managers: Labour Transnationalism at Four Multinational Auto Companies. British Journal of Industrial Relations, 46(1): 76-97.

Greer, Ian and Marco Hauptmeier. 2012. Identity Work: Sustaining Transnational Worker Cooperation at Gm Europe. Industrial Relations, 51(2): 275-97.

Haipeter, Thomas. 2000. Mitbestimmung bei Volkswagen: Neue Chancen für die betriebliche Interessenvertretung? Münster: Westfälishces Dampfboot.

Hancké, Bob. 2000. European Works Councils and Industrial Restructuring in the European Motor Industry. European Journal of Industrial Relations 6(1): 35.

Hartz, Peter and Inge Kloepfer. 2007. Macht und Ohnmacht. Hamburg: Hoffmann und Campe.

Hauptmeier, Marco. 2011. Reassessing Markets and Employment Relations. In Paul Blyton, Edmund Heery and Peter Turnbull (Eds.), Reassessing the Employment Relationship, pp. 171-94. Basingstoke: Palgrave Macmillan.

Hauptmeier, Marco. 2012. Institutions Are What Actors Make of Them – the Changing Construction of Firm Level Employment Relations in Spain. British Journal of Industrial Relations, 50(4): 737-59.

Hauptmeier, Marco and Edmund Heery. 2014. Ideas at Work. International Journal of Human Resource Management 25(18): 2473-2488.

Heery, Edmund and Mike Noon. 2008. A Dictionary of Human Resource Management. Oxford University Press.

Hendricks, Wallace. 1976. Conglomerate Mergers and Collective Bargaining. Industrial Relations, 15(1): 75-87.

Herber, Armin and Wolfgang Schäfer-Klug.2002. ‘How a European Works Council learned to negotiate’. Die Mitbestimmung, International Edition 2002.

Höpner, Martin, and Armin Schäfer. 2010. A new phase of European integration: organised capitalisms in post-Ricardian Europe. West European Politics, 33(2): 344-368.

IG Metall. 2004. Metall Nachrichten. Das Ergebnis. Union Leaflet. November 5.

Jürgens, Ulrich. 1998. The Development of Volkswagen's Industrial Model, 1965-1995. In Michel Freyssenet (Ed.) One Best Way? Trajectories and Industrial Models of the World's Automobile Producers, pp. 273-310. Oxford: Oxford University Press.

Katz, Harry C. 1993. The Decentralization of Collective Bargaining: A Literature Review and Comparative Analysis. Industrial & Labor Relations Review, 47(1): 3-22.

Katz, Harry C. 1985. Shifting Gears: Changing Labor Relations in the U.S. Automobile Industry. Cambridge: MIT Press.

Kotthoff, Hermann. 2006. Lehrjahre des europäischen Betriebsrats. Zehn Jahre transnationale Arbeitnehmervertretung. Berlin: Edition Sigma.

Laudon, Kenneth and Jane Laudon. 2011. Essentials of Management Information Systems. Boston: Prentice Hall.

Lillie, Nathan. 2010. Bringing the Offshore Ashore: Transnational Production, Industrial Relations and the Reconfiguration of Sovereignty. International Studies Quarterly, 54(3): 683-704.

Marginson, Paul. 1988. Beyond the Workplace: Managing Industrial Relations in the Multi-Establishment Enterprise. Oxford: Blackwell.

Markovits, Andrei. 1986. The Politics of the West German Trade Unions: Strategies of Class and Interest Representation in Growth and Crisis. Cambridge: Cambridge University Press.

Meardi, Guglielmo. 2000. Trade Union Activists, East and West: Comparisons in Multinational Companies: Aldershot/Burlington, Ashgate.

Moody, Kim. 1997. Workers in a Lean World: Unions in the International Economy. New York: Verso.

Morgan, Glenn, Peer Hull Kristensen, and Richard Whitley. 2001. The Multinational Firm: Organizing across Institutional and National Divides. Oxford: Oxford University Press.

Mueller, Frank and John Purcell. 1992. The Europeanization of Manufacturing and the Decentralization of Bargaining: Multinational Management Strategies in the European Automobile Industry. International Journal of Human Resource Management, 3(1): 15-34.

Opel Post. 1993. Standort Deutschland sichern. Company newsletter. June 22.

Opel Works Council. 1995. Arbeitszeitkorridor-Modell sichert Arbeitsplaetze und vermeidet Kurzarbeit. Works Council leaflet. August 29.

Piëch, Ferdinand. 2002. Auto.Biographie. Hamburg: Hoffmann und Campe.

Raess, Damian. 2006. Globalization and why the ‘time is ripe’for the transformation of German industrial relations. Review of International Political Economy. 13(3): 449-479.

Raess, Damian. 2014. Export Dependence and Institutional Change in Wage Bargaining in Germany. International Studies Quarterly. Forthcoming.

Raess, Damian and Brian Burgoon. 2006. The dogs that sometimes bark: globalization and works council bargaining in Germany. European Journal of Industrial Relations. 12(3): 287-309.

Rehder, Britta. 2003. Betriebliche Bündnisse Für Arbeit in Deutschland: Mitbestimmung Und Flächentarif Im Wandel. Frankfurt am Main; New York: Campus.

Ross, Arthur. 1948. Trade Union Wage Policy. Berkeley: University of California Press.

Schumann, Michael, Martin Kuhlmann, Frauke Sanders, and Hans Joachim Sperling. 2006. Auto 5000: Ein Neues Produktionskonzept. Hamburg: VSA.

Sisson, Keith, James Arrowsmith, and Paul Marginson. 2003. All Benchmarkers Now? Benchmarking and the ‘Europeanisation’ of Industrial Relations. Industrial Relations Journal, 34(1): 15-31.

Tilly, Chris. 1995. Globalization Threatens Labor’s Rights. International Labor and Working-Class History, 47(1): 1-23.

Turner, Lowell. 1991. Democracy at Work: Changing World Markets and the Future of Labor Unions. Ithaca: Cornell University Press.

UGT GM. 2005. Caso Meriva — Cronica de un processo. Avanzar. Union magazine. Number 22, 6–13.

Vidal, Matt. 2013. Low-autonomy work and bad jobs in postfordist capitalism. Human Relations 66(4): 587-612.

VW. 2006. Declaration of the WWC. 11 May 2006, Wolfsburg.

Walton, Richard E., Joel Cutcher-Gershenfeld, and Robert B. McKersie. 2000. Strategic Negotiations: A Theory of Change in Labor-Management Relations. Ithaca N.Y.: ILR Press.

Williams, Karen and Mike Geppert. 2013. Bargained globalization: employment relations providing robust 'tool kits' for socio-political strategizing in MNCs in Germany. In Christoph Dörrenbächer and Mike Geppert (Eds.) Politics and Power in the Multinational Corporation, pp. 72-100. Cambridge: Cambridge University Press.

Windolf, Paul. 1989. Productivity Coalitions and the Future of European Corporatism. Industrial Relations 28(1): 1-20.

Table 1: Four patterns of whipsawing

Associated practice	Informal	Coercive	Rule-based	Hegemonic
Benchmarking	yes	yes	yes	yes
Organizing competition between plants	yes/no	yes	yes	yes
Explicit and specific threat to shift production	no	yes	yes	yes
Formal bidding	no	no	yes	yes/no
Influencing ideas	no	no	no	yes

Table 2: The determinants of whipsawing capacity

	Parallel production	Standar-dization	Production Platform	Market demand	Market supply	Plant utilization
High	yes	high	yes	low to medium	high excess supply	underutilized
Medium	yes	low to high	no	low to medium	some excess supply	some spare capacity
Low	no	low	no	high	market clearance	full capacity utilization

Table 3: Whipsawing episodes

	Episode	Whip-sawing capacity[3]	Labor relations strategy	Whip-sawing pattern	Episode	Whip-sawing capacity	Labor relations strategy	Whip-sawing pattern	Episode	Whip-sawing capacity	Labor relations strategy	Whip-sawing pattern
	1980s				1990s				2000s			
Ford	UK & Germany 1985 UK & elsewhere 1988	M	emphasis on forcing	coercive	Germany & elsewhere 1993	M	emphasis on partnership	informal	Germany and Spain 2006	H	emphasis on partnership	informal
					Germany & elsewhere 1997; Spain & Germany 1998	H	forcing	coercive				
GM	Spain & elsewhere 1988; Germany and elsewhere 1988	M	emphasis on partnership	informal	Germany & elsewhere 1993	M	emphasis on partnership	informal	UK & elsewhere 2000; Spain and Poland 2001	H	emphasis on forcing	coercive
					UK, Belgium, UK 1995; Germany, UK, Belgium 1998	H	emphasis on forcing	coercive	Germany & Poland 2004; Poland & Spain 2005; Germany-Sweden 2005; Europe-wide 2005-2006	H	Simul-taneous partnership and forcing	rule-based
VW	--	L	emphasis on partnership	--	Germany & Spain 1995	H	emphasis on partnership	informal	Germany & elsewhere 2000; Spain & Slovakia 2002	H	emphasis on forcing	coercive
					German suppliers after 1999	H	Simul-taneous partnership and forcing	rule-based	Germany & elsewhere 2004; Portugal & Germany 2005; Within Germany 2005; Spain & elsewhere 2007	H	strong partnership	hege-monic

[3] High (H), medium (M) and low (L) whipsawing capacity (see table 2).