Abstract
The article discusses contemporary attempts by corporate management to implement a new control regime within the decentralised, network-firm. This new regime is based on the idea of the ”internal market” as the prime governance principle. Although widely discussed, rather little is still known about the effects of such a new control regime on the level of production. On the basis of two in-depth case studies in the German Automobile Industry the article shows how ”internal contracts” are used to internalise market pressure, and what effects these contracts have on the shop floor. The new regime of control, we argue, needs the first-line supervisor as an intermediary. However, the new regime turns him – at least partly – into a contemporary version of a ”petty capitalist”.
1. "Economic decentralisation" as the new paradigm of corporate restructuring in Germany in an age of "shareholder value" and "financialisation"

Within the last five years or so, the doctrine of "shareholder value" as a corporate governance regime superior to the "stakeholder"-view of the firm, so far dominant in "Rhenish Capitalism" (Albert 1992), has become quite popular among German business executives. Whatever the inconsistencies, inherent contradictions and problematic results that such a shift in the nature of German corporate governance might provoke, "shareholder value" has been adopted by leading German "blue chip"-companies like Siemens, DaimlerChrysler, VEBA, BASF, Thyssen, or Lufthansa (cf. Höpner 2000). Although "shareholder value" might be "(...) nothing new under the sun as far as financial theory is concerned" (Aglietta 2000: 148), it does legitimise "(...) the predominance of a capital market view of the firm over an industrial one." (ibid.) "Shareholder value" is part of a process, that Froud et al. (2000a, 2000b) have termed "financialisation". Financialisation, they argue, "(...) denotes a new form of competition which involves a change in orientation towards financial results but also a kind of speed up in management work" (Froud et al. 2000a:104). This "new form of competition" is no longer primarily focused on products and processes: financialisation is not "(...) about better factories with lower build hours, less inventory and higher quality" (ibid:103). Instead, financialisation is marked by "(...) constant pressure on management from the capital market; with financial results in terms of Return on Capital Employed and share price the primary measure of enterprise performance". (Froud et al. 2000b:2) As a consequence, work of senior management under financialisation "(...) is increasingly focused on restructuring via internal downsizing and reorganisation as well as merger and acquisition; under a corporate governance regime which allows hostile take over and rewards value investors; (...)” (ibid.)

However, as Froud et al. (2000b) further suggest with regard to the case of the Ford Motor Co., the success of a strategy that aims at “financialising” a "blue chip"-company, is highly questionable. In addition, some recent empirical findings with regard to the "German case" indicate, that it would be an oversimplification to unilaterally deduce strategic managerial decisions from financial variables, because alternative economic and political rationales still play an important role (Kädtler/Sperling 2000; Dörre 2002; Jürgens et al. 2001). So far, empirical research on the impact of financialisation on German corporate structures and internal governance and control processes is still at the beginning (cf. Streeck/Höpner 2003). Nonetheless, it is evident that financialisation and "shareholder value" constitute the
ideological and "theoretical" basis for a new paradigm of corporate restructuring, that can be termed "economic decentralisation" (Moldaschl and Sauer 2000). As the expression indicates, the new paradigm consists of two elements, that make the core of contemporary corporate restructuring: "decentralisation" captures the organisational side of the remodelling of hierarchically structured large scale corporations. Basically, one can distinguish decentralisation processes on three levels: on the level of the corporation at large, the vertically and horizontally integrated, centrally governed corporation is segmented into smaller units, and functions and responsibilities previously executed at the centre are delegated to these segments, or "business units", respectively ("strategic decentralisation"). On the level of the individual production unit, functional departmentalisation gives way to a process and product-oriented organisational structure. Finally, on the operative level, new functions and responsibilities are delegated to teams or groups of employees (e.g. task integration, TQM). What decentralisation processes on all three levels have in common, is the re-definition of organisational boundaries within the firm, as well as between firm and environment.

Of course, organisational decentralisation is not a new phenomenon, neither at the company level (see e.g. the divisionalisation strategy of General Motors in the 1920’s), nor at the level of production (today’s "team” or "group work” finds it’s predecessors in the 1960’s and 70’s, and can be traced back even to the 1920’s; cf. Kuhlmann 2002). What makes contemporary management strategies particularly dynamic and new, though, are two developments: first, the before mentioned decentralisation strategies are no longer pursued separately, but are intertwined. Companies are re-defining both their external boundaries as well as the boundaries within the organisation in a combined attempt to turn themselves into network-corporations (Castells 2000). Second, corporations use new modes of internal co-ordination and control, that make use of the co-ordination mechanisms of the market. It is the market, or "economic”, part of the new paradigm that gives today’s corporate restructuring a particular new edge.

What we currently can observe is an expansion and diffusion of market oriented regulation and co-ordination mechanisms within the bureaucratic corporation. We speak of an expansion, rather than of an introduction, because firms were never solely governed by hierarchy and bureaucracy (see e.g. Eccles and White 1988), nor were capitalist markets ever "free” of non-market regulations, quite the contrary (Polanyi 1978). In this sense, the ideal-
typical, neo-classic, view of market and hierarchy as completely distinct co-ordinating mechanisms for economic exchange relations never corresponded to social reality (see e.g. Granovetter and Svedberg 1992). Today, it is the working model of the network that aims at capturing the ambiguity and complexity of exchange relations in capitalist economies. While some authors conceptualise the network as a separate, distinct mode of co-ordination beyond market and hierarchy (e.g. Powell 1990), others argue, that networks constitute an organisational hybrid between market and hierarchy (e.g. Williamson 1985; Sydow 1992). Without discussing this controversy here, we take sides with the latter position in the sense, that we regard the network-firm, as one type of network, as a hybrid organisational form that opens up the hierarchically co-ordinated firm for market risk and control (Castells 2000).

The prime co-ordinating mechanism within the network-firm is the internal market. The idea of the internal market is, as Scott (1996: 99) puts it, “(...) quite simple: One replaces a centralised bureaucratic hierarchy in which commands flow downwards but never up with 'flatter' less tightly controlled organisations. The chief mechanism used to achieve this is the devolved budget. Each section of the organisation becomes its own 'budget holder' and buys services from other parts of the organisation or, crucially, can go outside the organisation where comparable services can be found more cheaply in the wider market. Each unit is, of course, also a supplier of services to other parts of the organisation, and, again, crucially, can sell its services in the wider market if these in their turn are competitive”. What makes “internal” markets similar to “external” markets is the “purchaser-provider-split” (Sayer 1996). What differentiates “internal” from “external” markets is the nature of this split within firms: "The purchaser-provider-split creates only quasi-markets rather than ‘normal’ markets because the final users or clients are not the purchasers (...), because property rights are not usually exchanged, because there is usually a strong monopsonist, and because providers are not free to move in or out particular ‘markets’ but have to stick to delivering a particular set of services.” (Sayer 1996: 13)

The idea of the (internal) market as a superior governance principle in a decentralised network-corporation denotes images of a self-regulating, flexible, even "virtual", in short: "post-bureaucratic", organisation. However, these images suppress "blind spots" of the new paradigm, insofar as they keep quiet about the fact that the demand for co-ordination and integration increases, not decreases, in a decentralised corporation due to growing complexity and mounting insecurity (Drumm 1996; Kühl 1995). Moreover, as a number of researchers
have recently pointed out, economic decentralisation is likely to generate centrifugal forces within the organisation, insofar as the implementation of internal markets and the establishment of competitive relations within the firm threatens the cohesion of the whole (see e.g. Deutschmann et al. 1995; Moldaschl and Sauer 2000; Koller 1998). From a control perspective, then, the ideal-type of such a network-firm poses the question of how employees within decentralised segments of the corporation are controlled and how their obedience to the organisation is maintained.

As we argue, it is the "internal contractualisation" of exchange relations that plays a central role not only as a means to internalise market pressure, but also as an instrument that reduces insecurities and control-deficiencies within the decentralised, and "economised", modern corporation. To make this argument, we draw on in-depth empirical research in two German automobile plants, that were restructuring their operations according to the new paradigm of "economic decentralisation". The main focus of our case studies lay on the consequences of restructuring processes on lower management and the workforce\(^1\) (cf. Tullius 1999, 2001). By doing this, we were able to gather comprehensive data on the impact of "internal contractualisation" on the level of production.

2. Economic decentralisation under the predominance of "shareholder value": the case of AutoAG

At AutoAG, one of Germany’s "Big Three” car and truck producers, economic decentralisation became the role model of corporate restructuring and rationalisation in the second half of the 1990’s. The foundations were laid in the beginning of the decade, when organisational decentralisation was initiated in response to the accumulating signs of crisis in the late 1980’s and the publication of the MIT-study "The Machine that changed the World" (Womack et al. 1990). However, decentralisation basically took place on the operative, or shop floor, level and concentrated on the implementation of "new concepts of production" (Kern and Schumann 1984, 1992), mainly group-work and "Total Quality Management" initiatives. The centralised, hierarchically structured organisation as such remained basically unchanged.

\(^{1}\) Research was conducted between 1997 and 2000. Methodologically, our focus lay on qualitative empirical research, i.e. semi-standardised interviews with corporate managers (on all hierarchical levels, form plant executives to first-line supervisors) and workers, lasting between 1 and 3 hours. In addition, quantitative data was gathered through a standardised questionnaire, answered by a total of approximately 50 foremen, and 241 workers, respectively. For additional information on the project cf. Tullius 2003.
Albeit considerable productivity gains, from the point of view of management, rationalisation and reorganisation at this stage remained too limited. Since the mid-1990's AutoAG’s top management initiated processes of organisational restructuring on all corporate levels in combination with the "marketisation" of intra-firm relations. Back then, a new CEO took office of the Holding and made the maximisation of "shareholder value” the main focus of corporate strategy. In public appearances of the new CEO, statements regarding corporate strategy often culminated in orders like ”profit, profit, profit” and ”speed, speed, speed”. Besides this profit maximising-rhetoric, a reorientation in the form of corporate governance took place, that intensified the re-shaping of organisational boundaries and gave concrete rationalisation concepts a new objective.

With regard to strategic decentralisation, a programme of horizontal and vertical disintegration was put through, that can be summed up under the label ”concentration on core competencies”. This policy is directly attributable to a ”shareholder value”-strategy, insofar as only those corporate activities are maintained in the medium term in which a company is already market-leader in a segment, and where sufficient rates of return – according to capital-market standards – can be delivered to the shareholders (Hirsch-Kreinsen 1998). All those businesses, however, that do not meet these expectations, are faced with the threat of ”divestment”, i.e. sale, outsourcing, or closure in the near or medium future. At the level of the holding to which AutoAG belongs, this led to a reduction of divisions from 35 in 1995 to 25 in 1997. Each remaining division is supposed to deliver a pre-tax ”Return on Net Assets” (RONA) of at least 15,5 percent: ”This is the hurdle, from which a division contributes positively to the value of the company” (annual report 1998: 3; own translation).

As remarked above, the focus of our research lay on the impact of economic decentralisation on the operative level, particularly on the role and function of lower management and shop floor workers. In the course of this, our attention was drawn by efforts of plant management to implement market-like contracts as a new instrument to regulate and control production performance. Before we discuss this issue, we shortly want to sketch the two cases.

The case studies were carried out in two manufacturing plants: an engine plant (ENGINE) belonging to the passenger car division, and an axle and components plant (AXLE) that belongs to the truck division of AutoAG. In both cases the above mentioned key aspects of economic decentralisation were the guiding principles for plant restructuring. However, due to varying circumstances, "economic decentralisation” developed differently. ENGINE is a
quasi-“green-field” location, that started regular production in 1996. For a new generation of V6- and V8-cylinder engines, AutoAG decided to build a completely new factory (and not build up a new production line in an existing one), that should be designed and operated according to "state-of-the-art" manufacturing principles: single-purpose plant, a factory building with only one floor, "JIT-production", flexible automation, "flatter" management hierarchies, team work, "kanban", etc.. The decision to build the new engine-plant at a German location was preceded by intensive negotiations between management, the works council, and the regional IG Metall union, in which division management threatened to relocate production to another European country. In the following bargaining processes the employee representatives made a number of drastic concessions, that on the one hand considerably reduced personnel expenses and helped to reach the profit-targets given by senior management. On the other hand, these concessions – most notably greater work flexibility, a new compensation agreement and the lowering of social standards – blazed the trail for similar bargaining processes in other plants throughout the corporation. ENGINE is operated as a cost centre within an "engine production centre", that is run as a profit centre, and whose management is responsible for all types of car engines manufactured at AutoAG. The profit centre itself belongs to a big industrial plant with nearly 20,000 employees, in which other parts of the "powertrain" (engines, transmissions, axles) are manufactured and accompanying services are provided. This entity is now called a "business unit".

At AXLE, the internal restructuring process had a rather different starting point. The plant is part of the powertrain sub-division within the truck division of AutoAG and mainly manufactures and assembles axles for trucks and busses. AXLE is a "brown field"-location with a long history of economic crisis and short-time work. Although the truck division claims to be market leader in certain segments, competition always was more harsh (and global) in this business than in passenger car’s, particularly for components suppliers like AXLE. Since the beginning of the 1990’s the plant operated in the red, and during a meeting of division and plant management in 1995, division management threatened to hive-off the plant, should the local management not be able to cut costs by about DM 140 Million in the near future. This sum supposedly represented the "cost gap" to other competitors in the market, and was the main result of a "global benchmark" executed that year. For local managers and the works council, the fact that another plant in this division had been hived-off as a limited liability company (GmbH) the same year – a transformation that gives management more leeway and power in bargaining processes with employee representatives –
showed that outsourcing of operations was indeed a serious threat. In the following two years, the local works council agreed upon a set of plant agreements, so called "agreements to secure the location", to reach the DM 140 million cost-target. A chunk of DM 50 million was supposed to come through the reduction of personnel expenses, mostly through "socially acceptable" layoffs: employment in the plant was reduced from 4,500 (1994) to 3,000 (1997). Moreover, the works council agreed on a permanent five percent wage cut – a concession unprecedented in corporate history – as well as on a new job performance and compensation system that includes remuneration based on group performance. As in the case of ENGINE, the agreements included a flexibilisation of working hours as well as working days (three-, and later, four-shift-system, Saturday as a regular work day).

In both cases, then, the works councils made considerable concessions to either maintain production in the region (ENGINE), or to prevent management from outsourcing production (AXLE). These concessions had an immediate impact on cost and productivity figures in both plants. However, restructuring reached beyond traditional cost cutting and downsizing. In both plants, the traditional modes of co-ordination and control were transformed according to the new paradigm of "economic decentralisation". Restructuring now combines extensive organisational decentralisation with the establishment of internal markets as a key co-ordination mechanism. The main elements are:

- definition of production units as cost centres; enhanced responsibility of centre-management for comprehensive, more complex production processes as well as for economic performance; centres now have to operate within the limits of a devolved budget, both with regard to the centre above, and with regard to other centres within a unit;
- exchange relations between units are regulated through devolved budgets and cost-targets; controlling functions are decentralised to gather the necessary economic data for performance evaluation; "benchmarking" is used as a means to evaluate performance between internal, as well as compared to external competitors;
- "target costing" is used as an instrument to bring product development and production into line with market requirements as early as possible;
- at the same time, centralised control on "strategic" issues (product development, planning, investment) is maintained, not the least through the intensified use of information technology;
- a couple of hierarchical layers is eliminated (2 out of 7); fewer managers have wider spans of control;
- "group work" is the general work organisation principle on the shop floor; group spokesmen are the intermediates between first-line supervisor and work group;
- quasi-market contracts are implemented as a new co-ordinating and control mechanism on the shop floor.

In the following, we will focus on the last point, arguing that these contracts bring a new dynamic into the corporate control regime, and significantly changes the role of the first-line production supervisor.

3. Internal contractualisation and supervisory control

Through instruments like benchmarking, target costing, budgeting- or transfer-pricing-policies, market pressure is internalised on the level of the individual unit. On the "operative" level of direct production the key feature to bring the organisation closer to "the market", or vice versa, is the establishment of contractual relations as a means for performance control.

At AutoAG, performance contracts are used as a regulating instrument on an horizontal as well as on a vertical axis. Obviously, when a segment or unit buys or sells services to other segments or units in the corporation, and makes an agreement about that exchange, this is a "horizontal" contractualisation process. Contractualisation on the vertical axis means the introduction of contracts along the hierarchical ladder of the corporation. We will focus on this latter development, and want to refer to it as internal contractualisation. We want to speak of internal contractualisation to set this process apart from those management strategies that aim at contracting-out, that is: externalising, services of all kind from the organisation (see e.g. Sayer 1996; Irmer 2001). In contrast to this, we want to use the term "contractualisation" with regard to the use of contracts to control internal exchange relations that were previously regulated through hierarchical and bureaucratic means.

3.1 "Target agreements" as quasi-market contracts

Internal contractualisation on the operative level is marked through the growing dissemination of "target agreements" as an instrument to regulate and control corporate processes. As an instrument for personnel management, "target agreements" are not new in German
corporations like AutoAG. Under the "management by objectives" (MbO) label they are widely used since the beginning of the 1980's among middle and upper managers, as well as in departments at the "interface" to external markets, like e.g. sales (Baethge, Denkinger and Kadritzke 1995). That is, "MbO" neither addressed lower levels of production management, like first-line supervisors, nor production workers on the shop floor. What we can observe in the case of AutoAG as well as in many other German corporations today is a growing dissemination of these contracts (Bender 1997, Hlawaty 1998, Tondorf 1998, Kalkowski et al. 2001) throughout the organisation. It is the *depth of application* of target agreements on all hierarchical layers that brings a *new dynamic to rationalisation* and also changes the forms of supervisory control.

Within AutoAG, "target agreements" are seen as a "key instrument to regulate economic behaviour" (internal paper) on all corporate levels. In 1996, works council and management signed a general agreement in which both sides expressed their belief, that "target agreements" will become an "increasingly natural part of the leadership and work culture at AutoAG". In a legal sense, "target agreements" comprise elements of a works contract (Schwegler 1997). In contrast to the labour contract, that places the labour power of an employee at the disposal of the employer (and formally not more than that), the holder of a works contract owes a pre-defined result to a client. He is an employer of his own, and receives remuneration only when the contracted result is successfully delivered to the customer: a works contract is a market contract. "Target agreements" resemble works contracts insofar as they make the individual worker, or work group, responsible for reaching production and other targets that have been defined *ex-ante* in a bargaining process with the supervisor. These contracts do not supplant labour contracts, but are introduced in addition to them, and are legally binding. "Target agreements" on the shop floor level mark a redefinition of the established forms of the regulation of labour: job performance is now defined in terms of the degree of the fulfilment of production targets that are specified between supervisors and workers. In the course of this, the employment relationship itself is transformed into a hybridised form that gives room for the introduction of market demands.

### 3.2 The supervisors new role

"[W]hy is there no foreman problem in Germany?", asked Peter Lawrence in his comparative study quite some while ago (Lawrence 1980: 156), and indeed: particularly for British observers the relative stability of the supervisors function in German industry must have been
somehow astonishing when compared to Great Britain (Child and Partridge 1982; Delbridge and Lowe 1997). The German sociological debate since the late 1950’s comes up with rather different, or ambiguous, results. Quite similar to the findings of Child and Partridge, some classic studies, e.g. by Bahrdt (1958) and Weltz (1964), found evidence for an erosion of the supervisor’s function and authority in the process of technical rationalisation and increasing functional differentiation and divisionalisation. The first-line supervisors had to cope with dwindling authority while at the same time had to ensure the functioning of a taylorist-fordist production organisation. Still, they remained an important social actor and "hinge" between upper management and work force. Overall, however, in the process of a continuing technical penetration of mass production processes, the supervisor’s future was assumed to be rather bleak. This hypothesis received some backing in the late 1980’s in the course of experiments with and the introduction of new organisation principles, particularly "group work". According to some observers, the first-line supervisors, already marginalised by taylorism and advanced information technologies ("CIM"), would finally become obsolete through the introduction of "semi-autonomous" work systems, which relieve management from regulating and controlling the employees through direct supervision.

On the other hand, more recent studies in the 1980’s and 1990’s showed a remarkable stability of the position of the foreman in the German industry (Jauch 1997; Kädtler and Hardwig 1998). This stability, we argue, has to be attributed to the fact that the foremen plays a key role within the new control regime. This shall not give the impression that the foremen have not been subject to severe job loss in the industry at large (cf. Plicht 2002), as well as in our cases. At AXLE, the number of foremen was cut in half between 1992 and 1998, while in the business unit to which ENGINE belongs, only 790 first-line supervisors remained in 1997 (from 1,041 in 1993). The role and position of those foremen who ”survived” the staff cuts, however, is re-valued. In programmatic concepts regarding the new role of first-level supervisors, they are labelled as "Entrepreneurs in Partnership". This term indicates that the "new" supervisor is supposed to think and act like an (internal) "entrepreneur", while simultaneously has to take on the role of a "partner" with regard to employee relations in his work system.

The "entrepreneurial” function of the supervisor basically comprises the encompassing responsibility for the performance of his cost centre. The cost centres are now subject to a detailed and tight control of performance figures by the controlling department, and the
indices are seen as the "central lever" (Head of Industrial Engineering, ENGINE) for regulating and controlling production performance. Formally, the first-line supervisor now negotiates these performance targets with his department head at the beginning of a budget period and lays them down in a "target agreement". Subsequently, the supervisor has to negotiate the production targets he agreed upon, with the work groups in his work system. This new arrangement marks a complete break with the past, when the definition of job performance standards (and corresponding remuneration) was an issue that was – within the framework of the union agreement – dealt upon by the local works council on the one side, and the industrial engineering and personnel departments, on the other side. The first-line supervisors were, more or less, onlookers of this bargaining process on the definition of workplace performance. Now, they negotiate performance standards directly with the respective work group. The industrial engineering experts are turned into mere "advisors", the works council takes on the role of a "grievance agency" in case that an agreement between work group and supervisor cannot be reached. This might be the case when the demanded targets are deemed to be too high from the point of view of the work group.

The negotiation and contractualisation of performance targets within the new system is not a bazaar-like arrangement. Firstly, the performance targets are, as already mentioned, "broken down" from the overall cost and production targets of the unit. Secondly, the performance figures are still based on data and previous experience of Industrial Engineering. The crucial point is, that in the bargaining process the targets are specified between first-line-supervisors and the workers themselves, and the means by which these targets shall be reached are laid down in a contract. This contract not only comprises traditional quantitative targets, like the number of pieces produced in a given time, but also targets on quality and cost reduction per piece, on "system availability", on the number of "improvement ideas", as well as on group development. This procedure turns the previous system of job performance regulation upside-down. Now, the result of a given work process is defined ex-ante with regard to certain parameters (quality, quantity, resource utilisation etc.), while the way this result is achieved, is laid in the full responsibility of the work groups. Accordingly, the main directive of production management now is: "I don’t care, how you make your work! Just get me the figures!" From a control perspective, this indicates a shift from an external to an internal regulation and control of workplace performance by the work groups themselves.
Taken together, from the point of view of corporate management, "target agreements" have a number of immensely important functions within AutoAG. First, they increase the commitment of all employees, not merely managers, on the economic goals of the firm. To strengthen this commitment, salaries and wages increasingly depend on the fulfilment of economic targets on the level of the holding, the business unit, as well as the individual centre and work group. Secondly, "target agreements" allow for an internalisation of (market-) risk into the employment relation. Thirdly, "target agreements" lead to continuous rationalisation, because performance targets are re-negotiated at least once a year; they also lead to higher levels of transparency about the efficiency and performance situation of production processes, work groups, departments, or units. Hardly surprising then, that the chief industrial engineer of AXLE describes the new system as "the best thing that could have happened to industrial engineering", because he now gets the most precise data about production problems and rationalisation opportunities. According to this manager, a "rationalisation effect" of 30 percent can be achieved through the implementation of these contracts and the new job performance system. Finally, and probably most importantly, "target agreements" could help corporate management to "solve" one of the central problems of the capitalist production process: the transformation of labour power into labour (Marx 1972). By making the individual worker, or the work group, respectively, responsible for organising and optimising his labour power in such a way, that the contracted targets can be reached, the former management task of transforming labour power into labour becomes the responsibility of the workforce itself.

Why then, it might be asked, is there still a need for the first-line-supervisor? Our empirical findings suggest two answers: First, this system of "regulated autonomy" on the level of production is a potentially risky undertaking for corporate management. To completely abandon the position of the first-line-supervisor could result – this might be called the "power-argument" –in too much autonomy on the shop floor. In this view, the supervisor is still needed to exert coercive power, if e.g. a consensual agreement on performance targets cannot be found. And indeed, the foremen today are given greater influence in personnel matters than in the past, as they have a greater say with regard to layoffs and the renewal of temporary work contracts. The significant increase in the use of temporary employment contracts in our two factories provides supervisors with a powerful instrument to discipline employees. Second, this might be called the "functional argument", the first-line-supervisors are indispensable, because the new system of work place regulation remains a social process.
As such, the new control regime requires social actors capable of transforming and communicating corporate targets into work-system targets. We agree with Camuffo and Volpato (1997: 116), that the "continuous negotiation of worker’s commitment and participation” marks the core function of supervisory work. The university-educated engineer is, at least from the point of view of management, unable to fulfil this function: "We need somebody who speaks the language of the workers! Because of his socialisation, this is can only be the foreman, not the engineer!” (Personnel manager, ENGINE).

4. Conclusion
Since the mid-1990’s, German manufacturing corporations increasingly make use of "internal markets” to co-ordinate internal exchange relations and regulate performance. As we tried to show with recourse to our two automobile cases, the establishment of internal contracts can be interpreted as an attempt of management to maintain a high degree of centralised control over the production process. Internal contracts like "target agreements” are a means to internalise market pressure on the shop floor and thus induce "economic thinking” and self-rationalisation among the work force. Scott (1996: 101/102) has argued, that it is the "(...) combination of autonomy without control which is the underlying source of stability of both social and hierarchical relations with internal markets. Centralised bureaucracy (...) does not give up its power by constituting newly autonomous subjects as long as it retains control of the environment in which the actors operate autonomously.” In our view, it is the establishment of internal contracts that provides the framework that allows management to regulate and control all relevant parameters of the production process.

First-line supervisors play an important role in the process of internal contractualisation, as they are the ones who have to bring processes and employees into line with market demands, brought to them through devolved budgets and new controlling practices. They do so by continuously re-negotiating the actual performance targets with the work groups. Of course, this requires new social and managerial skills from the foremen, as these targets have to be set in a "discursive” process (Tullius 1999). Like in the past, they are the ones who have to reconcile production demands with the sometimes contradictory requirements of the whole. At the same time, they have to secure the production and reproduction of the structures of control and domination. First-line supervisors were needed, and are still needed to (at least) alleviate, if not solve the contradictions that capitalist rationalisation produces. The supervisors new role is ambivalent. On the one hand, foremen assume more responsibility and
gain more authority within the production organisation, and their position is strengthened. On the other hand, their position remains volatile because, firstly, increased responsibility also means accountability even in circumstances that the foremen cannot really influence. This becomes evident when the contractualisation process between foremen and their supervisors is analysed: In reality, the supervisors do not have much influence on the targets, because they are derived ("broken down") from plant management level, via area management level, via department head to the supervisors. "Herr W. (the department head) gives the orders. If this would be a real agreement, I would be able to influence a few things. Some things I do need, others I don’t" (Supervisor ENGINE). "The agreements are no real negotiations; the number of pieces, for instance, is an order from the plant, or somewhere else. What I can influence to a certain degree is the number of employees in my work system” (Supervisor AXLE). Consequently, almost 80 percent of the supervisors in AXLE, and 43 percent in ENGINE considered these ”agreements” to be orders. Nevertheless, 86 percent (ENGINE) and 88 percent (AXLE) of the foremen, respectively, now feel ”more responsible for the economic performance” of their work system, due to these contracts.

As long as key parameters within their work environment are defined by other actors within the corporation (upper management, engineering and controlling departments) their managerial autonomy is actually rather limited. Secondly, not all the supervisors in our two case studies benefit from the new "leadership"-programme, or have the skills to assume the role of an ”Entrepreneur in Partnership”. It remains an open question so far, how continued reorganisation and rationalisation at AutoAG will particularly affect this group of first-line-supervisors. There was widespread believe among the supervisors we interviewed, however, that their job security is far from being assured.

Craig Littler described the ”internal contractor” of the 19th century, the ”predecessor” of today’s first-line-supervisor, as an “undisputed master of his own shop”, who ”hired and fired, set wages, planned and allocated work” (Littler 1982: 86f). Moreover, he, unlike all his successors, showed a ”petty capitalist interest in costs and profits” (ibid.). It seems, that the ”new” supervisors we found regain this mental disposition, albeit without having the encompassing power on the shop-floor that the internal contractor once had.
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