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Incentive-Compatible Change Management in a Welfare State:

Asking the Right Questions in the German *Standort-Debate*

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Abstract

A simple game-theoretical model of "reengineering" shows that the contract-theoretical principles of incentive-compatible corporate governance also apply to the dynamic processes of corporate restructuring. These principles help to explain why reengineering projects fail and to design such projects more successfully. In addition, they illustrate how welfare state provisions interfere with the mechanisms of corporate governance and thus allow for predictions about firms' strategies for adaptation. Extensions of the model will explain why "globalization" not only causes pressure on firms within a given institutional framework, but also urges governments to change national institutional frameworks.

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1. Introduction

Decreasing growth rates, increasing German investments abroad, and low foreign investments in Germany present evidence of what has caused the so called „Standort-Debatte". Germany seems to be losing its attractiveness to investors and thus losing business and jobs. By contrast with other states, so the argument goes, welfare states such as Germany do not offer a favourable environment to corporations. The reasons for this are usually seen in over-bureaucratization, high labor costs, high tax levels and over-regulation[1]. Business leaders maintain that, due to these factors, welfare state-based corporations face disadvantages in two respects: first, the costs of production are too high and second, the ability to react to changing markets is restricted - that is firms are immobilized in that they are suffocated by the state[2]. Yet it is not realistic to expect fast or major changes in the political framework of those states. In Germany, „the grandmother of social welfare states"[3], strong political groups contend that such a framework constitutes the typical traits of the „Social Market Economy" and they are not prepared to change it. Article 20 of the German constitution maintains that Germany is a „...demokratischer und sozialer Bundesstaat". For analytical reasons, this paper accepts this framework as given and ignores inefficiencies in its construction[4]. Instead, it concentrates on explaining successful management strategies within that framework. The framework this paper is referring to can be characterized as a welfare-state framework as opposed to a non-welfare-state environment. Characteristics of a welfare-state environment include: comparatively high wages, rigid dismissal and severence pay-rules, mandatory codetermination, high unemployment benefits and public unemployment programs, a comprehensive social security system including retirement plans, a universal public health insurance system and a comprehensive public education system. On the flip side of the coin are comparatively high labor costs as well as high corporate and private tax-rates[5].

While individual enterprises cannot directly affect fundamental ***external*** factors, there are also ***internal*** factors that contribute to the problems of high costs and inflexibility. The fact that some firms are thriving in a given framework while others are not, shows that it is not exclusively the institutional framework that decides about company success or failure[6]. Reducing the internal causes of inflexibility on the basis of the given external framework offers opportunities to develop and implement a successful management strategy that does not primarily rely on trying to exert political influence to change the framework. Management can strategically respond to a particular institutional environment by organizational strategies which might even turn this framework into a comparative advantage. This is a different approach than just applying American or Japanese concepts to German firms - regardless of the particular institutional framework.

The concept I am proposing can be called „Incentive Compatible Change Management". Its theoretical basis is a microeconomic model of corporate change which focusses on ***distributional conflicts*** within a firm. Internal rent-seeking activities of management and employees can thus be

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[1] See for example Shlaes (1994), p. 112 ff.

[2] See for example Unternehmerinstitut e. V. (1995) and Hundt and Riester (1995).

[3] Shlaes (1994), p. 110.

[4] This does not imply that the German institutional framework can be considered to be efficient, but this paper is not proposing ***political*** changes. It is proposing a new approach to management problems within firms.

[5] For a detailed comparison, see Shlaes (1994), Streeck (1995), Baethge and Wolf (1995) and Economist (1996) on the 'German Model', and Weinstein and Kochan (1995) on the U.S. Model.

[6] See Hammer and Champy (1994), p. 24.

included in the design of reorganization plans. This is important considering the fact that many 'reengineering' projects fail because they lack support from middle-management or employees[7]. What makes this resistance so hard to overcome is that it is not merely a formal or official resistance or vetoing, but rather an implicit strategy: „... resistance does not always show its face"[8]. Hammer and Stanton call this phenomenon „passive aggression"[9]. Reengineering concepts are by definition top-management initiatives[10], and if top-management cannot credibly answer everybody's question „What is in it for me?"[11], projects tend simply to die. Using an incentive compatible approach can help to avoid this situation in which reengineering and other change-projects generate dissappointing results, measured by their own standards[12]. ***If no employee or manager with a threat point expects to lose through corporate reorganization in comparison to alternative future options, no one has an incentive to resist change.*** A reduction of intrafirm resistance to change can be induced by ***redistributing a fraction of future profits***. This is an application of the idea of incentive compatibility to change management[13].

Given the simplicity of this idea, it is surprising that it does not appear in the literature on „reengineering", „business process redesign", „process innovation" and the like[14]. An outline for such an approach will be provided in this paper. In addition to the general approach, it will be shown that, within a welfare-state framework - for example that of German political institutions - corporations have to apply different management instruments than elsewhere. Simply transferring American reengineering-concepts is likely to fail under German conditions, whereas some instruments which are inapplicable in the U.S. can successfully be implemented in German firms. The question management has to ask is: How can we create incentive compatible organizational structures within the firm? The question government has to ask is: How can we create an institutional environment which supports the creation of incentive compatible organizational schemes in firms? In this paper, we will concentrate on the first question while we leave the second one to subsequent research.

A simple model of Incentive Compatible Change Management will be developed in section two. In the third section, typical reengineering tools will be analyzed in terms of the model considering the characteristics of the German welfare-state framework. Finally, some conclusions will be drawn comparing the chances for Incentive Compatible Change Management under the German and U.S. framework.

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[7] This is the overall message of Champy (1995). See also Hammer and Champy (1994), pp. 35 f., 212 and 223, and Milgrom and Roberts (1995), pp. 250 f.

[8] Hammer and Stanton (1995), p. 122.

[9] Hammer and Stanton (1995), p. 119.

[10] See Hammer and Champy (1994), p. 168, Hammer and Stanton (1995), pp. 23 and 34. For an overview of the state of the art in reengineering in the German speaking world see Nippa and Picot (1995) and Theuvsen (1996).

[11] Hammer and Stanton (1995), p. 32.

[12] See Hall, Rosenthal, and Wade (1994).

[13] For further explanations of incentive compatibility, refer to Ledyard (1989), Marschak (1989), Milgrom and Roberts (1992) and Wolff (1995a). See also Wolff (1995b).

[14] See for example Davenport (1993), Hall, Rosenthal, and Wade (1993), Hammer and Champy (1994), Hammer and Stanton (1995), Champy (1995), Smith (1995), Champy and Nohria (1996) and Moeller (1996).

2. A Model of Corporate Reorganization Processes

Concepts of business reengineering follow a top-down approach[15]. This implies that top-management designs presumably optimal organizational strategies for the firm without substantial input or consent from lower levels of the firm's hierarchy. The optimal solution to the organizational problem is supposed to be the one which maximizes the profit of the firm.

There are, however, ***two fundamental problems with this approach***. The first one is that the implementation of an efficient organizational structure requires perfect knowledge and incorporation of all relevant information. This information does not only concern market opportunities, financial resources, production technologies and general environmental outlooks. It also refers to the employees' individual human capital and customer-specific know-how. It has to be decided who does what at which time and place. This aspect of the organizational problem is called the ***coordination problem***[16]. Efficient coordination refers to the 'technocratically' optimal organizational arrangement, in which it is assumed that everyone affected wants and supports this solution. In a complex world, however, it is unlikely that top-management will be able to acquire and process all this information in a centralized way[17]. Thus, there are informational constraints to top-down procedures. The more complex and bigger a firm and the higher the uncertainty of future perspectives, the less likely it is that a few top executives can find the best technical solution to the firm's organizational problem by themselves - even if they incorporate outside consultants.

The second problem is that reorganization requires the support of everyone who has to change his or her behavior. One way to model this problem is offered by Nanda (1996). He discusses the conditions under which employees will be able and willing to change their behavior simultaneously. Reengineering is, in his view, mainly a coordination problem. His model has the structure of a prisoners' dilemma ***between employees on the same hierarchical level***[18]. In this paper, however, we follow a different approach. As elaborated in the introduction, we are assuming that - although important[19] - mere coordination or communication problems between employees are not the main reason why reengineering projects fail. An efficient coordination solution might also not be implementable because employees or individual top- or middle-managers, i.e. ***people on different levels of the firm's hierarchy***, do not support it. Specific groups of employees or managers on different hierarchical levels may be unable or unwilling to adopt new procedures. If they are unable, they have to be trained. So this, again, is basically a technocratic problem. But even if well known, technically efficient solutions might not be implemented because employees refuse to change their behavior and instead stick to traditional procedures. In many cases, organizational change is prevented by employees who are afraid of

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[15] This is true for the general conception in spite of the fact that there are some elements of employee participation. See Champy (1995), Davenport (1993), Hammer and Champy (1994), and Hammer and Stanton (1995).

[16] See Wolff (1995a), pp. 20 ff.

[17] See Milgrom and Roberts (1995), pp. 241 f. Milgrom and Roberts distinguish business decisions by innovation and design attributes. Innovation attribute means that the information required for the optimal solution of a decision problem is spread out on lower hierarchical levels of the firm. It is not directly and/or costlessly available to the top-management. In contrast, a design problem is one that requires a lot of a priori information about the different variables which affect the solution. Failing to achieve the desired relationship between the variables is costlier than other kinds of errors. 'Innnovation decisions' tend to require a decentralized mode of management, whereas 'design decisions' demand centralized coordination.

[18] See Nanda (1996).

[19] See for example Cushman and King (1995).

losing benefits which they enjoyed under the old organizational pattern. People are not concerned about the overall size of an abstract corporate pie but rather about their specific share of the pie. Rational, self-interestedly utility-maximizing actors will always choose a large piece of a small pie rather than a small piece of a large pie if the absolute size of the former is bigger than the size of the latter. Thus, if they expect losses from a corporate reorganization plan, they have incentives to resist this plan - even if they know they will harm the firm. This second problem is what we are going to call a ***motivational*** or an ***incentive problem***[20].

The coordination and the motivation aspect of corporate organization are related in two respects. In a narrow sense, suboptimal incentives simply prevent the implementation of known technically optimal solutions. In a broader sense, inefficient incentives for the employees to cooperate might even prevent top-management from finding out what the technically optimal strategy is[21]. As argued above, it is unlikely that top-management has and considers all relevant information. It relies on a flow of information from lower hierarchical levels. This information, however, will not be provided if people are neither asked for nor receive benefits from the provision of information. Asking the employees is a question of coordintation. Providing adequate rewards is a question of motivation.

2.1 The Logic of Successful Reorganization

We will start explaining the logic of successful reorganization with a simple game theoretic model of the implementation of a given reorganization plan. Imagine a firm which is still doing well, but it is predictable that it will not remain competitive in the future unless some new production procedure is implemented. For simplification let us assume that there are only ***two actors***, a top-manager and owner O, and a middle-manager and employee E. They are both risk neutral and not wealth-constrained within the range we are considering. ***Reorganization means they both have to invest in order to achieve a higher future output than in an alternative future situation without reorganization***. The situation can be modelled as a game in which both partners decide about sequential investments before they get some payoffs at a later stage. We assume that if the employee rejects the reorganization plan by not investing, either the owner has nevertheless to invest, or she has to liquidate the firm. If the owner invests, the firm will continue to exist, but on a lower level of profitability. We suppose that the structure of the game, which is illustrated in the subsequent figure, is known to both players. All outcomes are determinate. At this point, we will assume that payoffs, investments, transfer payments and reservation utilities are observable and verifiable.

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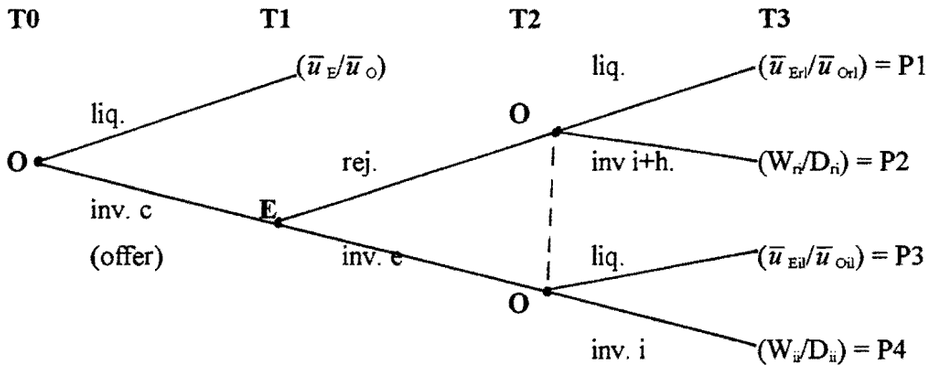
[20] See Milgrom and Roberts (1992), p. 126, and Wolff (1995a), pp. 21 f.

[21] A typical example illustrating the impossibility of complete centralization of know-how and, thus, the neccessity of decentralized corporate decision-making can be found in Fabrikant (1996): The chairman of a large investment firm avoids choosing stocks himself acknowledging that his subordinates are simply better at it. The chairman sees his function in choosing and leading the people 'who know', but not in intervening in actual trading decisions. In this paper, we will abstract from the problem that top-managers might not have the right incentives to implement the optimal organizational structure.

Figure 1: Reorganization Game with Two Actors



In T0, the owner has two options: She can either liquidate the corporation immediately and receive $\overline{u}_O$, which is the dividend she can earn by investing her money elsewhere. Or she can invest c in reorganization, for example by hiring Jim Champy to develop a reengineering plan. c are the costs of setting up the reorganization plan. E would get $\overline{u}_E$, which is determined by his outside options, i. e. his wage on the labor market or the unemployment benefits he could collect. At this stage, we will assume that reorganizing is more attractive than liquidation. Thus, we do not have to worry about the returns of the liquidation decision at this point. But we have to keep in mind that the owner's outside options at T0 determine if she is prepared to start the reorganization game at all. In this setting, she offers a reorganization plan to the employee in T1, who can either accept it or reject it. To model the implementation of a reengineering plan as an offer from the owner to the employee does not seem to be unrealistic considering the fact that it is a top-down approach. The very idea of reengineering implies that it is always the top-management who takes the initiative. We assume that the employee's decision to reject or to accept the plan is openly revealed and verifiable by the owner; the owner sees if the employee either leaves the firm or stays and cooperates. If the employee stays, he has to make an investment e. This is usually an investment in his human capital since the employee has to develop new skills to cope with a new production technology. These new skills can either be firm-specific or non firm-specific. In T2, the owner decides after he has seen whether the employee has rejected or accepted the plan. In both cases, she can either invest - for example in a new machine - or liquidate the company. Her investment would be i, after E has invested e. But if E had not invested, O would have to invest i plus some extra cost h. In T3, the payoffs are realized. D is the share of the total profit, which goes to the owner (dividend) and W is the share that goes to the employee (wage). $\overline{u}_E$ and $\overline{u}_O$ are E's and O's reservation utilities. In the reorganization game, O maximizes D while E maximizes W. The total profit is Π. D, W, $\overline{u}_E$, $\overline{u}_O$ and Π can be monetary as well as non-monetary. They are observable and verifiable. At this stage, we assume that the partners do not contract on transfer payments[22]. O and E can write a contract in which they determine which Π they want to realize and how they will divide it. This means they write the desired W and D into the contract. Four

[22] In reality, this might be caused by technical restrictions to the transferability of payoffs or by the fact that the partners simply did not come up with the idea to contract on transfer payments.

different outcomes are technically feasible, leading to four feasible payoff-schemes. Thus, the partners can have a choice of four different reorganization plans, i. e. contracts.

1. P1 = $(\overline{u}_{Erl}/\overline{u}_{Orl})$, with $\Pi_1 = \overline{u}_{Erl} + \overline{u}_{Orl}$, where the employee rejects in T1 and the owner liquidates in T2. Both get their reservation utility, which is defined by their respective outside options.
2. P2 = (W_{ri}/D_{ri}), with $\Pi_2 = W_{ri} + D_{ri}$, where the employee rejects and the owner invests nevertheless.
3. P3 = $(\overline{u}_{Eil}/\overline{u}_{Oil})$, with $\Pi_3 = \overline{u}_{Eil} + \overline{u}_{Oil}$, where the employee invests and the owner liquidates the company. Both get their respective reservation utility.
4. P4 = (W_{ii}/D_{ii}), with $\Pi_4 = W_{ii} + D_{ii}$, which is realized when both partners invest.

For a more convenient presentation, we can write the partners' feasible actions in the form of a two by two matrix. E chooses first, O second, after she has seen E's choice.

Table 1: Feasible Reorganization Plans

		O	
		liquid.	invest
E	reject	P1 $(\overline{u}_{Erl}/\overline{u}_{Orl})$	P2 (W_{ri}/D_{ri})
	invest	P3 $(\overline{u}_{Eil}/\overline{u}_{Oil})$	P4 (W_{ii}/D_{ii})

We can now explain under which conditions a reorganization plan is implementable. To do this, we have to compare the different payoff-schemes or contracts between which the actors can choose.

For a better understanding, we will use numeric examples of payoff-schemes to describe the problem:

Example A:

P1 = (0/2) with $\Pi_1 = 2$,

P2 = (4/-2) with $\Pi_2 = 2$,

P3 = (1/3) with $\Pi_3 = 4$, and

P4 = (5/7) with $\Pi_4 = 12$.

Table 2: Example A

		O	
		liquid.	invest
E	reject	(0/2)	(4/-2)
	invest	(1/3)	(5/7)

Since the owners' first investment c has already been sunk before T1, the employee has to move first. We can now predict which individual strategies the employee and the owner will choose: At T1 the employee knows that if he rejects the plan, the owner will choose to liquidate the firm, because otherwise she would face a loss of 2 as opposed to a positive payoff of 2. If the owner liquidates the firm after the employee has refused to invest, the employee gets nothing. If the employee invests, the owner can either liquidate the firm and receive a payoff of 3 or invest and receive a payoff of 7. Because the employee knows that the owner is rational and self-interested, there is no danger that she might choose not to invest, which would lead to a payoff of only 1 for the employee. The owner will always prefer a payoff of 7 to a payoff of 3. Thus, it is obvious that choosing to invest leads to the highest possible payoff for both players. Investing is the dominant strategy for E, and after he has invested, O will always invest, too. It is a subgame perfect szenario, which 'automatically'generates the maximum total profit with maximum individual payoffs for both players. The incentive compatible solution to the reorganization problem of this firm is a contract between owner and employee $(W_{ii}/D_{ii}) = (5/7)$. This means that the owner and the employee sign a contract were they promise to split up the prospective outcome of 12 so that the employee gets 5 and the owner 7. This way, they would successfully commit themselves to P4.

2.2 Transfer Payments

Unfortunately, business life is not always as ideal as in example A. To see an alternative setting, we will consider another example:

Example B:

P1 = (0/1) with $\Pi_1 = 1$,

P2 = (5/2) with $\Pi_2 = 7$,

P3 = (0/5) with $\Pi_3 = 5$, and

P4 = (4/8) with $\Pi_4 = 12$.

Table 3: Example B

		O	
		liquid.	invest
E	reject	(0/1)	(5/2)
	invest	(0/5)	(4/8)

It would still be optimal to reorganize the firm because the maximum profit of 12 is realized at P4, when both partners make their investments. But, in this example, the maximum the employee can win is 5, which is his share at P2. If the owner does not invest, the employee will get nothing, no matter what he did in T1. But E knows that if he does not invest the owner will still do so, because at P2 her payoff is 2 as opposed to 1 at P1. The owner can be held up by the employee. Investing at T1 is not attractive to the employee because he would only win 4 as opposed to 5. It is rational for E not to invest. This setting generates a socially suboptimal result, because at P2 the total profit is only 7 as opposed to 12 at P4. The reorganization plan fails in the sense that it does not generate the maximum total profit. It also fails in the sense that D is suboptimal. This is important, because ***usually success or failure of management strategies are measured from a shareholder-perspective***, for example in terms of shareholder-value or dividends. To increase these figures is the idea behind such strategies. If the owner/manager anticipates that D will be less than her outside options at T0 she will not even consider initiating any reengineering projects but instead liquidate the firm at T0 and invest her money somewhere else to collect $\overline{u}_O$.

Let us now suppose that the two players start negotiating transfer payments, which can be paid out of each partners' returns at T3. At T1, the employee can go back to the owner and offer to invest e, provided the owner promises to pay a transfer t of 5 out of his share of the profit at T3. Since O can observe E's investment, she would not have to pay if E does not invest. This way, the owner would receive a payoff of 3, which is still better than 2, and the employee could extract an additional rent of 5, which adds up to a payoff of 9. Yet, making this offer to O would not be rational for E, because once E has made his investment, O would defeat and liquidate the firm. This way, O receives 5 and E nothing. The szenario would not be subgame perfect. If E wants to make sure that O does not liquidate the firm after he has invested, he has to demand a transfer payment t of only 2. This way, O would still receive 6 at P4 and would hence prefer it to P3. And E would also receive 6, which makes him better off than P2. Agreeing on t = 2 as a bonus payment for successful reorganization, which changes the payoff-scheme P4 to (6/6) instead of (4/8) is thus the efficient, subgame perfect solution to this reorganization game. As illustrated in Table 4, choosing P4 is now the dominant strategy for both partners.

Table 4: Example B with Bonus Payment in P4

		O	
		liquid.	invest
E	reject	(0/1)	(5/2)
	invest	(0/5)	(6/6)

In this case, a bonus payment from O to E after successful reorganization can, in principle, assure the implementation of the reorganization plan P4.

Often enough, however, reality is more complex than example B, and promising a transfer at P4 will not be sufficient. Corporate reorganization might well expose the following structure.

Example C:

P1 = (0/1) with $\Pi_1 = 1$,

P2 = (5/2) with $\Pi_2 = 7$,

P3 = (0/7) with $\Pi_3 = 7$, and

P4 = (3/8) with $\Pi_4 = 11$.

Table 5: Example C without Transfer Payments

		O	
		liquid.	invest
E	reject	(0/1)	(5/2)
	invest	(0/7)	(3/8)

The differences between example B before the transfer payment and example C are that P3 is (0/7) instead of (0/5), and that P4 is (3/8) instead of (4/8). This change of P3 means that O gets 2 more than in example C if she sells the firm after E's investment. The change of P4 implies that E's payoff after both partners' investments is by 1 lower than in example B. In this setting, there is no transfer payment at P4 that the partners could contract upon, because there is no transfer that is attractive to both E and O: E cannot ask for a higher transfer payment than 1, because otherwise O will to liquidate at T2. At a transfer of 1, however, E would receive 4 at P4, which is still less than the 5 which he gets at P2. The plan will - predictably - not work because the incentives for O and E are such that they will end up at P2 instead of P4. If the partners want to realize P4 it is not

sufficient to change the payoffs at P4 by a bonus payment in case of successful reorganization. An additional contracting tool is needed.

For implementing P4, the partners can also try contracting upon transfer payments for P1, P2 and P3 in addition to P4. Contracting is likely to get more complicated because the partners might have to define transfer payments contingent on each respective P. In example C, O has to offer a transfer payment $t > 2$, for example $t = 3$, at P4 to get E to invest in T1. Otherwise, E will still prefer not to invest, because he gets 5 at P3. He can still be sure that O will not liquidate after E rejected because doing so makes O's payoff only 1 as opposed to 2. But if O offers a transfer payment of $t = 3$ at P4, she will have incentives not to invest at T2 because she will get 7 at P3 instead of 5 at P4 after the transfer payment. She could promise, however, to pay a 'self punishment premium' to E at P3 and lower her own payoff at P3 while creating additional incentives for E to invest. O could offer to pay $t = 3$ at P3 and P4. This means O pays the transfer after E has invested, independent of her own decision. Her own decision, however, will be to invest after E has invested because otherwise O's payoff at P2 is only 2 as opposed to 5 at P4. With transfer payments at P3 and P4, P4 is implementable.

Table 6: Example C with Transfer Payments at P3 and P4

		O	
		liquid.	invest
E	reject	(0/1)	(5/2)
	invest	(3/4)	(6/5)

2.3 Why Reorganization Fails: Lack of Credible Commitment

As yet, we have only been looking at examples in which it is in principle possible to get to P4 just by redistributing a fraction of Π. In order to do this, the partners have to write a contract at T1, specifying transfer payments contingent on each P. We have assumed that the variables of the contract are observable and verifiable. In a more realistic setting, however, the contract will be observable to the two partners, but not verifiable by third parties. Assuming ***non-verifiability*** is realistic because there are non-monetary, private benefits included in both partners' payoffs, which are known to the partners but costly to evaluate from an outside perspective. If third parties cannot verify the complete set of investments, transfers, payoffs, and reservation utilities, the contract will not be enforcable. Promises will therefore be nothing but cheap talk. Why should E believe that O pays a transfer after he has invested? The contract will either have to be self-enforcing or the partners have to invest in informing a third party as an enforcing agent. This implies that we have to think about some additional contract provisions to make ***promises credible***.

If we want to find a reorganization plan that is implementable, i. e. enforcable, the ***design of the plan has to be different***. This means that we do not only need an approach that tells us how to implement certain payoffs by ex post transfer payments, but we do also have to observe some more variables and constraints when designing the plan for the reorganization process at T0. Thus, we do not focus our attention on negotiating ex post transfer payments. Instead we concentrate on the design of the plan which, given predictable strategic behavior of both partners, determines not only the outcome but also the ***process of reorganizing***. Strategic bargaining between the partners in the process of reorganization can be anticipated at T0 and, thus, incorporated in the plan.

It is important to recognize that extending the model to n employees instead of only one requires a consideration of each worker's individual situation. Thus, we would not be looking at sums of wages or outside options but to vectors of wages and outside options. In addition to this, we would have to consider the possibility of coalition formation and collusion as further complications to the model. Another extension of the model would be the consideration of uncertainty. But in order to illustrate only the general structure of the problem, we abstracted from these complications.

In the following section, we will summarize the insights gained above and formally state which restrictions have to be observed when developing a reorganization plan.

2.4 Principles of Incentive Compatible Management

Using the simple model with only two actors illustrated in Figure 1, we can summarize the following rules of incentive compatibility which have to be observed when designing a new organizational setting for a firm[23].

1. The partners have to compare the prospective outcome of the new organizational design Π_4 to the outcomes of prospective alternative outcomes in the same future period of time. So the ***points of reference are the different settings in T3*** as illustrated in Figure 1, or expressed in a simpler way: a future without reorganization. Comparing the outcome of a prospective new organizational design to the status quo, which is not going to last anyway, can either be explained by a lack of information or by irrationality. The former cause can be eliminated by information. We will not deal with the latter in this paper[24].
2. It is 'technically' efficient to implement a new organizational design for which both partners have to invest if ***Π_4 is higher than the outcome of any alternative future setting after deducting all switching costs***. The technical switching costs C are the sum of all investment costs (c, e, i and h). This describes the coordination problem of corporate reorganization.

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[23] These principles, though simplified, correspond with standard contract theoretical or principal-agent models of corporate governance and personnel management. See for example Milgrom and Roberts (1992), Lazear (1995) and Wolff (1995a).

[24] It is, however, a psychological problem in corporate change management, because employees tend to compare future perspectives to the status quo, not to other future perspectives. From this phenomenom results a „concession aversion", that eventually leads to substantially greater losses, see Husted Medvec, Valley and Thaler (1995). From an economic perspective, such a behavior is a 'mistake', because people harm themselves. Making this mistake is not restricted to employees.

3. The owner - from a typical shareholder perspective - is ***maximizing her returns***, D[25]:

   $$D = \Pi - W - t$$

   This implies that she is also trying to minimize her individual switching costs if they are not fixed, e. g. for technical reasons (as they are in the example above). In any case, she will minimize the transfer she has to pay. Transfer payments can be payed by O to E (positive t), or by E to O (negative t). The transfer payments are an important aspect of the motivation problem of corporate reorganization.

4. The employee is ***maximizing his returns*** W:

   $$W = \Pi - D + t$$

   He will also minimize his individual switching costs, if they are not fixed. In any case, he will try to maximize the transfer payments he gets.

5. There is a ***participation constraint for the owner***: The owner will only be willing to consider a further investment in the firm if she does not have any more attractive investment opportunities outside the deal with E. This refers to T0 as well as to T2. The profitability of the owner's alternatives defines her threat point, and thus the lower boundary of the returns she must receive to find corporate restructuring attractive. Therefore, ***her bargaining position is not only defined by the additional outcome (value added) her investments will generate but also by her opportunity costs***. Translated into the language of our simple model, this means that investing the returns from liquidating the firm at T0 or at T2 in the market may not yield higher returns than investing in the firm:

   $$D - t \geq \overline{u}_O, \overline{u}_{Orl}, \overline{u}_{Oil}$$

   This implies that a change of outside options ('exogenuous shock') can initiate renegotiation. The owner's participation constraint can also be interpreted by looking at the cost-elements (W, c, i, h, and t) of her equation: the internal costs of providing a certain product or service can push D - t below the level of alternative market profits ('endogenuous shift'). If endogenuous elements of her calculation are high compared to outside prices, the owner might not abandon her investment plans and liquidate the whole business. Instead, she might just choose a different partner[26]. Raising the owner's costs reduces her share of the profit. And if her return D falls below the utility of any feasible outside alternative, the owner will not cooperate with E.

6. There is also a ***participation constraint for the employee***. He will not agree to cooperate in the reengineering project if his income from it is exceeded by the returns from any alternative options on the labor market. Thus, the employee's bargaining position is also defined not only through the value added by his cooperation but also of his opportunity costs:

   $$W + t \geq \overline{u}_E, \overline{u}_{Erl}, \overline{u}_{Eil}$$

   Since E's outside options are to some extent defined by political decisions, e. g. on the level of

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[25] It is important to note, that there is no 'benevolent social planer', who maximizes Π directly. But we can assume that it is the aim of owners to maximize their shareholder profit as much as it is the goal of employees to maximize their income.

[26] This is an explanation why in some cases strikes are not an effective union-strategy to avoid outsourcing activities of corporations. Instead of focussing on the root of the problem, which is high internal cost, they fight the symptoms thereby increasing the costs even further and, thus, putting even more internal jobs at risk. This logic is, for example, behind the current strike at GM, see Bradsher (1996). Some business is not in general unprofitable to a firm, it is only unprofitable with certain partners.

unemployment benefits, the welfare state framework has direct effects on E's calculation. Another important outside option for both employee and owner is leisure. Especially if individuals are not (strictly) wealth-constrained, they might prefer to just 'stay at home' instead of worrying about work. Another outside option is an equivalent occupation on the black market[27]. Both partners' outside options are another important aspect of the motivation problem of corporate reorganization. They determine the lower boundary of their return from investing into reorganization.

7. Promises and contractual provisions have to be ***credible***. Promises are credible and therefore binding if the partner who makes them will ex post harm him- or herself by breaking them[28]. To create credible commitments, partners can use „hostages"[29]. Any irreversible, specialized investment into a specific business relation can be considered to be such a hostage, for example the acquisition of specific skills or equipment. By cheating after such an investment has been made - and sunk - the partners risk loosing it. Another hostage can be a partner's reputation. Hostages induce a coalignment of interests between the partners in incomplete contractual relationships. Any promise which is not backed by negative consequences for the partner who breaks it, is - in economic terms - nothing but cheap talk. If the prospective returns from breaking a promise are higher than the returns from not breaking it, we can predict that rational actors will break the promise.

To summarize even further: This model captures four aspects of reorganization which are not systematically covered by the current discussions, but essential for understanding corporate reorganization:

a) The rational reference points are ***future alternatives***.

b) We have seen that a 'technically' feasible solution might not be implementable if the partners cannot contract on ***transfer payments*** (motivation problem).

c) Commitments have to be ***credible***.

d) We have seen how the partners' ***outside options*** determine the minimum return their investments into corporate reorganization have to yield.

Knowing this, we can analytically trace the reasons why organizational change becomes neccessary: ***Exogenuous technological innovations*** - for example new communication technologies - ***as well as external institutional changes*** - for example the European Common

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[27] This is a worse problem in Germany than in the U.S. Legal labor contracts are heavily taxed and burdened with high deductions for social security (including old age pensions, unemployment plans and health insurance), so the net or 'cash' benefit of such a contract is substantially below the nominal wage. Thus, working on the black market is comparatively attractive. In some - illegal cases - unemployed who were receiving comparatively high unemployment benefits were found to have *additional* black market income. The high income an unemployed can „earn" in Germany makes it unattractive to seek legal employment at all, see Handelsblatt (1996). On the other hand, an analoguous calculus applies to employers: Since they have to pay a contribution to each employee's social insurance, they have also incentives to seek ways to buy 'net' labor.

[28] See Milgrom and Roberts (1992), p. 133.

[29] Williamson (1983).

Market for German firms or NAFTA for U.S. firms - ***might change outside options as well as internal cost structures***.

We can now understand, which variables are affected by the exogenuous shocks caused by 'globalization' and why old contracts are no longer supposed to be efficient. The exogenuous shocks of globalization as well as technological innovations disturb the old equilibrium. This leads to renegotiation or breach of contract because the existing contract ceases to be optimal for one or for both partners. Internal adjustments can be made either by negotiating changes of endogenuous variables with the existing partner or by choosing a new partner. However, if the institutional framework is perceived to be the reason of inefficient contracting, the partners will either try to excert political influence to change the framework or they will look for ways to avoid contracting under that particular framework. This can, for example, be achieved by building new plants abroad and hiring workers' under the foreign legislation. This way, owners of firms evade those provisions which prevent them from contracting efficiently.

Moving plants abroad does not harm the owners of the firms but the employees who will loose their jobs. Capital is usually mobile, whereas employees often hesitate to leave their country. Thus, it is not primarily a managerial problem for firms but a political problem for governments. Maximizing a firm's profit and, thus, securing the existence of the firm is the task of the firm's management. And there are sufficient strategies to secure profits either by optimizing organizational structures under the given framework or by evading a particular institutional framework. Minimizing a state's unemployment rate, however, is the task of the government. And if there are not enough jobs being offered under a given framework, government might want to adjust that framework. In the following section, however, we will continue focussing on the managerial aspects of corporate change.

2.5 Variables for the Design of a Reorganization Process

The principles described above provide a rough description of the conditions under which the partners will agree to cooperate in a reengineering project. In this section, we will explain the 'levers' they can use to write efficient *and* implementable contracts.

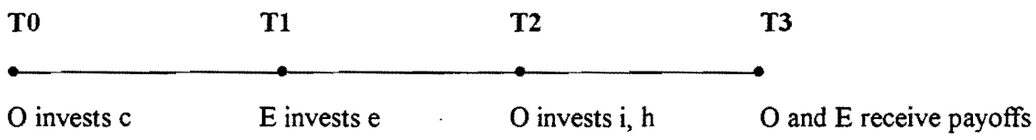
I. A typical variable to be contracted upon is the ***amount of transfer payments***. We can also extend the amount of feasible transfer payments by ***choosing between different forms of transfers***. There are monetary and non-monetary transfer payments. An actor's valuation for a non-monetary transfer may exceed another actor's costs of producing it. Offering non-monetary transfers is efficient if the costs of producing them are lower for one partner than for the other one, and if the respective good or service cannot be sold in a market. Producing a given amount of utility, one partner might enjoy economies of scale which do not occur to the other partner. The product, however, cannot be marketed and thus no monetary return derived from it. For example: leasing a large number of cars may reduce the costs per car substantially. Thus, it might be worthwhile to offer company cars to the employees, even if they pay the monetary costs themselves. The benefit to the employee is the cost reduction compared to the price of an individual contract with a car dealer. The costs incurred by the firm are the costs of managing the contracts. But even if added to the lease contract between the firm and the car dealer, each employee's share may still be lower than an individual contract[30]. Another example

[30] Large business consulting firms do typically offer corporate lease contracts for cars.

is the provision of daycare for the employees' children. Even if the company cannot offer day care cheaper than any other provider - it might even outsource it to a specialized supplier - it may be efficient to offer 'corporate childcare' to the employees, maybe even on plant. The benefit to the employee is that he does not have to worry about finding a place for his child elsewhere and taking the child to some other place every day[31]. In some cases, the firm might not even have to produce any extra goods or services in order to provide efficient incentives. Top-management may only have to allow employees to use firm equipment (at cost) for private purposes, for example corporate vehicles at weekends.

II. In addition to optimizing the sum of payments and returns at the end of the game, we can shift payments between the different stages of the game. The ***timing of transfers*** is crucial. In the simple model given in section two, all returns occur at T3. The investment costs, however, occur at different stages of the game. We will continue to assume that, for technical reasons, it is impossible to shift any investment costs. But we will now add the possibility for the partners to agree on shifting transfer payments to earlier stages of the game[32]. This is equivalent to shifting investment costs from one partner to the other.

Figure 2: The Timing of Investments and Returns



III. Another instrument which can be used to create a credible commitment is the provision of ***information to third parties***. The partners can use information to third parties to create a credible commitment. O can, for example, invest in establishing a reputation of never lying to her employees[33]. This reputation can be lost if a partner is ex post discovered to have been cheating. The partners can hire a neutral referee to supervise their books and verify all transfer payments. Thus, contracts become enforcable. However, the diffusion of information is not costless. The costs of communication raise the costs of the partners' investments.

Optimizing not only the sum of transfer payments but also the timing and the partners' information policy offers opportunities to increase the number of implementable reorganization plans. Thus, it raises the chance of finding a technically feasible *and* implementable reorganization design.

In the following sections, we will use our theoretical framework to describe typical management tools and analyze the conditions under which they help reorganize firms under a welfare-state framework.

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[31] For an illustration of how firms actually use this instrument, see Mainka (1995).

[32] We will ignore any effects market interest rates might have on the returns when shifting transfer payments. In section 2, we have also assumed that there are no wealth-constraints in the range of our interest. Thus, we can concentrate on the effects of shifts in transfer payments on the credibility of the partners' commitment.

[33] See Milgrom and Roberts (1992), pp. 139 f.

3. Change Management in a Welfare State

Institutions matter for successful corporate reorganization. This holds for institutions within firms, which form the ***governance structure*** of a firm, as well as for those which form the ***framework*** within which the firms operate[34]. The governance structure of the firm can be changed endogenously and individually, whereas the framework, which is common for all firms, cannot be changed directly by the partners of the reorganization game, O and E. The framework within which the corporate players can optimize business decisions and determine the variables of organizational change is defined by the property rights which are granted to everybody by law. From the point of view of a firm, these rights are defined exogenuously. They form the constitution which logically precedes any management decision and forms exogenuous boundaries to otherwise endogenuous variables[35]. As we have seen above, one variable is exclusively determined in the political arena: availability, duration and level of unemployment benefits. They determine E's outside options if E cannot find employment in the labor market. The inclusion of the partners' outside options into our approach to corporate reorganization ties management problems to the institutional environment and, vice versa, political problems of welfare states to managerial calculations. This interdependency between the reorganization game and the political framework has not yet been *systematically* recognized in the academic discussion - neither in the literature on corporate reorganization nor in the literature on welfare states.

3.1 A Rough Characterization of the German Welfare State

The basic idea of a welfare state compared to a non-welfare state is that the former grants a relatively high level of legally institutionalized and universal social rights to each individual. The overall effect of these provisions is that the risk of losing one's job as well as the cost of investing in human capital are highly socialized. Shifting risks from individuals to the state is the very idea behind any concept of a welfare state (see Table 7). In this respect, Germany is clearly a welfare state, whereas in the U.S., far less individual risk can be externalized to the state. This has major effects on strategies of reengineering, which will be analyzed in section 3.2.

Table 7: Sharing Employment-related Costs and Risks

	Non-Welfare State	**Welfare State**
Cost of Training ($\rightarrow$ e)	Individuals or Firms	Firms and State
Risk of Unemployment ($\rightarrow \bar{u}_E, \bar{u}_{Erl}, \bar{u}_{Eil}$)	Individuals	Firms (in the short run) State (in the long run)

Institutions that grant a high overall 'social standard' do not come without cost. Their 'price' consists of comparatively high labor costs as well as high corporate and private tax-rates, which

[34] See Williamson (1994), p. 326.
[35] See Wolff (1995a), p. 123.

might have adverse incentive effects[36]. In addition, such a system does not only insure actors against risks which they cannot influence. Instead, it can also induce problems of moral hazard. Thus there is a trade-off behind the provision of social rights by the state which resembles the basic principle of incentive compatible contracting in firms: the trade-off between incentives and risk sharing[37]. Thus, the design of a social welfare system can be inefficient in the same sense as the organizational design of a firm can be suboptimal. And just like a firm's suboptimal organizational design causes a loss of competitiveness in the markets, incentive incompatible welfare systems are not sustainable in the long run. In this paper, however, we will abstract from these problems and take the framework as given.

The German ***welfare-state framework*** is characterized by the following institutions[38]:

A) comparatively ***high wages*** resulting from a uniform and mandatory wage bargaining system (raising W, $\overline{u}_{E}$, $\overline{u}_{Erl}$, and $\overline{u}_{Eil}$; lowering D, $\overline{u}_{O}$, $\overline{u}_{Orl}$, and $\overline{u}_{Oil}$),

B) rigid and court-protected ***dismissal and severence pay-rules*** including motherhood protection (raising t),

C) mandatory worker ***codetermination*** and ***work councils*** (raising c, i, h, and t; lowering e),

D) wage-related ***unemployment benefits and public employment programs***, (raising $\overline{u}_{E}$, $\overline{u}_{Erl}$, and $\overline{u}_{Eil}$),

E) a comprehensive ***social security system including early retirement plans*** (raising $\overline{u}_{E}$, $\overline{u}_{Erl}$, and $\overline{u}_{Eil}$),

F) a universal ***public health insurance system*** (raising W; lowering D) and

G) a comprehensive ***public education system including professional training*** (lowering e, i, and h)[39].

The social rights defined by these provisions are universal in the sense that they are independent of any specific employer. Old age and unemployment insurance claims as well as health insurance coverage are not tied to any specific employer or occupation. Thus, the legally granted claims cannot be lost by quitting a specific firm.

As explained in sections 1 and 2, employees are often reluctant to support organizational change because they face ill-designed incentives. Thus, it is rational for them to resist change. It might help to appeal to their 'moral integrity' or their 'responsibility' for the firm, but in the long run, no one can be expected to behave in a way that does not maximize his or her own utility[40]. Thus, incentive compatible change management is more about changing governance structures or institutions than people. Going through individual management tools, which are being used for organizing and reorganizing firms, and evaluating their functioning by the principels elaborated above, we will see why, under a given framework, some measures are useful in reorganization and

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[36] See Shlaes (1994), Streeck (1995), and Handelsblatt (1996). For simplication, we will summarize taxes as well as the contributions to technically separated social security organizations as 'taxes'.

[37] See Brickley, Smith, and Zimmerman (1996), p. 237.

[38] For a characterization of different types of welfare states, refer to Esping-Anderson (1991). By his standards, the German welfare-state regime can be described as a „conservative" whereas the U. S.-regime is „liberal", Esping-Anderson (1991), p. 74. For further details, see Shlaes (1994), Streeck (1995), Baethge and Wolf (1995) and Economist (1996) on the 'German Model', and Weinstein and Kochan on the U.S. Model.

[39] For a comparison of the German and the U.S. training system see Lynch (1992), pp. 146 ff.

[40] „Preaching ... won't help", Hammer and Champy (1994), p. 27.

others are not[41]. We will refer to case studies and practical experience to illustrate different tools which can be used for incentive compatible change management. This also helps to verify the match between theoretically developed principles and practical experience[42].

3.2 Choosing Reorganization Tools in a Welfare State

Throughout most of the literature on reengineering and change management - though not in an economic language - a lot of reengineering tools are proposed and discussed[43]. In the consequent section, current management tools will be interpreted in terms of the variables they change in the process of corporate reorganization. The tools presented below form quite a comprehensiv check list of instruments the players might want to consider when designing a reorganization plan. We will explain which of the three 'levers' described in section 2.5 they use and analyze if and how they affect not only the coordination but also the actors' motivation to participate in reengineering. In other words: ***Do they help to change the firm's governance structure in accordance to the principles of incentive compatibility?*** We will also highlight which of these instruments are affected by the welfare-state framework and which ones are not. We will not, however, explain the relations and interdependencies between those instruments. (Remember this is not a textbook on corporate reorganization but a discussion paper on incentive compatible change management in a welfare state.)

a) Credibly communicating alternative future settings.

In practice, employees are often underinformed about the prospective outcomes of alternative future settings (W, D, $\overline{u}_E$, $\overline{u}_{Erl}$, $\overline{u}_{Eil}$, $\overline{u}_O$, $\overline{u}_{Orl}$, and $\overline{u}_{Oil}$) and the value of their individual contributions[44]. Moreover, even if they are provided with the information, they may still tend to use the status quo as a more convenient point of reference[45]. Top-management announcements, memos or 'sermons' might not be enough, because the employee knows that the owner has an incentive to misrepresent her threat point in order to improve her bargaining position. Thus, 'neutral' statements are needed. These can be provided by rating agencies, banks, business consultants (who have a reputation at stake) or even by trade unions. The information provided will be reliable and reduce the partners' notion of uncertainty, if the person who confirms it has no incentives to lie about them. Then the employee will believe his partner's threat point[46] and vice

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[41] Each individual instrument would, of course, require individual modelling. In this paper, however, I want to illustrate the qualitative effects of using and combining the instruments, so we get an idea of the general logic.

[42] Accompanying this theoretical research, I am working on a practical reorganization project with one of Germany's leading banks. This case, however, is not yet due to publication. A general problem doing research on the field of corporate reorganization is that it is hard to find the relevant data, because they are indeed not easily observable and verifiable. And even the data firms have are usually not free for publication, because they refer to internal policies, for example evaluations of and negotiations with middle-managers. So doing consulting and offering 'anecdotal' evidence is as close as we can get to empirical verification. For a selection of German case studies, see Nippa and Picot (1995).

[43] See, for example, the ten „Management Principles" by Smith (1995), p. 14, and the „Eight Steps to Transforming Your Organization" by Kotter (1996), p. 92. See also Hammer and Stanton (1995), Champy and Nohria (1996) or Moeller (1996).

[44] For an overview over possible mistakes in communicating change see, for example, Cushman and King (1995).

[45] See Husted Medvec, Valley and Thaler (1995).

[46] For example: „If we succeed, half of us will no longer have a job in this division. If we fail, none of us will", quoted by Davenport (1993), p. 33.

versa[47]. The lever pushed is, thus, the information policy. This tool is not directly affected by the welfare-state provisions stated above.

b) Using an employee participation scheme in corporate reorganization.

It is, in general, important to reward the extra effort of developing and communicating good ideas. Otherwise, the employee is expected to increase e without an equivalent increase of his income W or a transfer payment. Thus, his maximization calculus is being ignored. It is predictable that he will not offer any ideas, given that he is not even being asked (a coordination mistake) or that he is not allowed to participate in the profit increase his idea generates (a motivation mistake). The lever to be used is the transfer payment.

Mandatory codetermination is an external institution that enforces some degree of worker participation. On the one hand, it can be considered as slowing down corporate decision-making processes and thus increasing the owner's investment costs. On the other hand, it forces top-management to include the workers' advice into corporate strategies and can, thus, be helpful in increasing the firm's output. Some corporations even establish instruments for non-mandatory codetermination, for example, quality circles or distinguished reward schemes (Betriebliches Vorschlagswesen). These instruments, however, do not establish any legal rights or veto power. In this respect, they are different from mandatory codetermination[48]. In Germany, most instruments for corporate reorganization are affected by mandatory codetermination[49]. According to the Work Constitutions Act of 1972, work councils are granted consultation and information rights on general business issues, e. g., strategic plans, and codetermination or even veto rights in personnel issues. The codetermination provisions for large companies according to the codetermination law of 1976 are even tighter. They include employee representation in the firms' supervisory boards[50]. Mandatory codetermination improves the bargaining position of the employee by externally restricting the owner's sope of action and raising her costs. In contrast to that, non-mandatory codetermination is internally induced by a change of the firm's incentive structure leading to higher rewards for cooperation. Using a non-mandatory participation scheme can therefore not only be a measure to generate better decisions but also help to avoid expensive conflicts between the players. The existence of mandatory codetermination encourages the use of worker participation schemes. This turns out to be an advantage in corporate reorganization as long as the additional benefits or the avoidance of mistakes outweigh the additional costs.

c) Expressing the new vision in terms of performance results.

Communicating the new vision, P4 in our model, in terms of practical performance results offers several advantages[51]. The most important one is that it implies measurable and verifiable objectives and metrics, because otherwise the partners will not be able to unambiguously identify if they have actually reached P4. In reality, a new vision can - unlike P4 in our simple model - consist of more than one target dimension[52]. Verifiability of those targets is a neccessary condition of any

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[47] The employee might also have an outside option to communicate which can improve his bargaining position.
[48] See, for example, Baethge and Wolf (1995), pp. 232 ff.
[49] See Picot (1994).
[50] For a more detailed overview, refer to Baethge and Wolf (1995), p. 235.
[51] See Hammer and Champy (1994), p. 156.
[52] For example: „By the year x, we will have a market share of y percent in the European market for widgets and have a ROI of z percent" or „By the year m, we will have reduced the product development process to n month".

contracting process. The lever to be used is the information policy. The tool is not directly affected by any of the welfare-state provisions.

d) Publicly announcing the changes.

Practicioners use 'kick-off'-events in order to attract the highest possible attention. They also involve the public, for example by sending out press releases[53]. The effects of such a public kick-off strategy include first of all an improved coordination, because communication between employees and management is improved. Secondly, it also offers a credible commitment of top-management: By publicly announcing changes, their own promises become publicly verifiable. They are building up expectations, which, if unmet, would imply a loss of reputation. Thus, the owner commits herself to a higher loss in case of failure. Again, the lever used is investing in information. The tool is also not directly affected by any of the welfare-state provisions.

e) Quickly withdrawing old rules and providing unambiguous new ones, and transparent timing.

This is basically a matter of coordination. Institutions, such as corporate rules, provide focal points. They control people's expectation regarding other peoples behavior. Thus, unintended ambiguity harms finely tuned production processes. Efficient new rules, however, do also have a motivation aspect: they have to be sanctioned, otherwise they are bound to be ignored simply out of convenience. This measure also refers to the lever of information policy. There is no direct effect of any welfare-state provisions.

f) Using decentralized modes of operational decision-making: Empowerment.

The more decisions are taken on the lowest hierarchical level, where the required information is available, the less time and resources employees invest to excert 'influence activities'[54]. The more decisions the employee can take by himself and the more his income depends on their results the less incentives he will have to manipulate or withhold information or to argue with his boss. Decisions which do not have any design attributes should, thus, be decentralized[55]. Decentralization implies the right to decide on the one hand and the obligation to be responsible for the result on the other hand. Thus, a higher degree of decentralized decision making, which increases the workers investments e, should c. p. be accompanied by a higher proportion of performance related pay W for the employee. Highly qualified employees will tend to regard such a change as an improvement, whereas poorly qualified or 'lazy' employees will resist it. Thus, employee empowerment can be used as an effective means to induce self-selection between employees. The lever used is the transfer payment. The reallocation of the decision-making rights is, in general, not prevented by mandatory codetermination, but the changes in the pay-scheme which have to accompany that reallocation are substantially affected. Thus, the transfer payments required might turn out to be higher under the welfare-state framework.

g) Appointing teams for interdependent tasks.

This is, of course, only interesting when there is more than one employee. Thus, we are arguing beyond the limits of our simple model. In larger firms, teamwork cannot only improve communication and has, thus, coordination advantages. It also improves a decentralized, mutual control of all employees' investments. In an n-person model, it becomes therefore harder to cheat

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[53] See Nanda (1996), pp. 29 ff.

[54] See Milgrom and Roberts (1992), p. 192, and Wolff (1995a), p. 50.

[55] See Milgrom and Roberts (1992), pp. 91 ff.

on one's investment. Employees are unlikely to accept free-riders among them. On the other hand, collusions cannot do much harm as long as there are verifiable targets for each team and internal competition between teams. The lever used is again the transfer payment, because W must become contingent on team performance. An introduction of a new incentive scheme is, however, again affected by codetermination.

h) Internal retraining instead of firing excess employees.

If employees do not have to be afraid of losing their job, they are more willing to support organizational changes by contributing ideas of how to 'rationalize' their own work. This is equivalent to an assurance of top-management not to 'punish' people for investing in the corporate reorganization process. The example of VW, who introduced a four-day workweek at reduced pay instead of laying off a high proportion of employees, illustrates this. VW had a reputation to lose: „VW never tries to lay off"[56]. In addition, VW had publicy agreed to a contract granting excess jobs and retraining for a certain period of time. Thus, there was a credible commitment of the top-management to minimize the negative, but inevitable consequences of corporate restructuring for the employees[57]. Job security has encouraging effects on employees, since it promotes rationalization in their own work environment and encourages them to accept inevitable cuts in their benefits, as compared to the old status quo. VW offered job security and retraining in return for wage cuts and, thus, changed the form of payments according to the employees' valuation.

In this respect, the welfare-state framework can offer advantages for corporate restructuring, if we can assume that employees have a preference for job security. The median tenure in the present job is 7.4 years in Germany compared to 3.0 years in the U.S.[58]. Rigid dismissal rules and high severence pay requirements raise the costs of firing employees and thereby encourage long-term personnel policies. They also induce relatively high costs of adverse selection, i. e. costs of hiring and then firing inadequate employees. Thus, firms will try to keep the hiring of new employees to a comparatively low level[59]. Unlike in the U.S. framework, hiring and firing employees is more expensive because the hiring and settlement costs are higher. Thus, there are higher incentives for firms to keep and retrain the employees they have[60]. As a consequence, there are high entry and exit barriers to the labor market. These provisions are 'good' for the incumbent employees, but 'bad' for the unemployed. This is a result of the German system of wage bargaining and strong union-influence. In the U.S. there is, in general, a higher fluctuation in the workforce. This implies, as the flip-side of the coin, that it is easier to find a new job in the U.S. than in Germany. Thus, it is unlikely that job security is as important to an American employee as to a German one. The high risk of not finding a new job in Germany is partly caused by an 'overinsurance' of existing labor

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[56] A VW-employee, quoted in Shlaes (1994), p. 114.

[57] In addition to this, it has to be mentioned that the State of Niedersachsen is a minor shareholder at VW. Thus there was additional pressure to keep as much of the workforce as possible. On the other hand, there was political back-up for extra public programs from the State Governor, who is a member of the board, see Shlaes (1994), p. 115.

[58] See Streeck (1995), p. 10.

[59] See Acemoglu and Pischke (1995), p. 27.

[60] See Shlaes (1994), p. 115: VW has guaranteed retraining and jobs for two years to its 30,000 excess employees. The company estimates that it saved DM 1 billion by choosing this alternative as opposed to paying the settlement costs of layoffs. Under the U.S. framework, firing would have been cheaper. Yet, it might not have been a 'better' strategy in the long run.

relations. While the German system is favourable for 'job-owners' in the short-run, it is unfavourable for the unemployed and people who are likely to lose their jobs in the future.

i) Firing excess employees.

Firing an employee means terminating the contract between O and E. This implies a reduction of all payments to 0. In Germany, however, in most of the cases some transfer payments will be due nevertheless. But often enough there is no way of keeping everybody, or paying high settlement costs without endangering the existence of the entire firm. Thus, there are state programs to reduce the danger of locking firms too tightly into inefficient employment contracts. These programs are explicitly compensating firms for the effects of otherwise too restrictive labor regulations. Especially when there is a danger of mass layoffs, the state offers 'Arbeitsbeschaffungsmaßnahmen', early retirement schemes and other support programs, meaning that employees are basically 'taken over' by state agencies for further employment and/or retraining[61]. This is equivalent to an improvement of the employees' outside options accompanied by a shift of costs from firms to the state in a welfare state, whereas in a non-welfare state, the employee would himself have to bear most of the costs which are associated with the risk of unemployment. In welfare states, there is a higher reservation utility for employees without firms having to take over the full risk. In Germany, the risk of loosing one's job is, in the long run, insured by the taxpayers. In the short run, firms have to bear the risk, because they cannot simply fire their workforce. The tendency to shift costs and risks away from the individual employee is illustrated in Table 7 above. Lowering the employee's training costs is equivalent to reducing e. Reducing his risk of unemployment by providing comparatively well paid alternatives through state programs improves his reservation utility $\bar{u}$. Thus, welfare-state provisions have direct effects on the partners' rationales, which were described in section 2. Summarizing this, the dismissal of excess employees is heavily influenced by several welfare-state institutions: dismissal and severence pay-rules, codetermination, unemployment benefits and public employment programs, and the social security system, including early retirement plans. The main effect is a shift of costs from the players of the reorganization game to the tax payers and to everybody contributing to the social security systems. This is clearly incentive incompatible because tax payers and social security members have to pay for risks which they cannot influence while the actual players of the game can externalize costs. The neccessary trade off between incentives and risk sharing might have to be rechecked.

j) Firing resisting employees and hiring new ones.

Firing people is typically not among the first things recommended in the literature on reeingeneering, not even in the 'hard core' American management books[62]. In general, the advice is to try to include everybody by convincing them to actively participate[63]. Yet, pursuing the aims of reorganization too smoothly does not seem to do the trick: „In recent conversations with a number of successful reengineering executives, we asked how they would have reengineered differently if they had it to do over again. They all agreed that they would have gotten rid of their naysayers more quickly. They had to get rid of them in the end anyway. Keeping the naysayers didn't do them any good, and it certainly didn't do the companies any good. Achieving executive

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[61] See, for example, Shlaes (1995), p. 117. He emphasizes that Germany's unemployed „often enjoy greater benefits - free health care, for example - than the working poor in the United States".

[62] See, for example, Hammer and Stanton (1995), pp. 131 ff., and Smith (1995), p. 47.

[63] See, for example, the passionate sermons in Champy (1995).

alignment is extremely important, and the earlier, the better"[64]. Believing practical experience, quickly firing resisters has to be included in the concept. And even if it does not actually have to be done, the option is needed in order to create credible threat points for the bargaining process between owner and employee. Otherwise, the employee is virtually invited to use the status quo as the point of reference instead of his future outside options. Thus, a credible information policy is required, and a termination of all payments, which is equivalent to a termination of the contract, might also be called for.

Firing employees, however, especially if it has to be done quickly, happens to be one of the measures most difficult to implement under the German institutional environment. Simply firing resisting people may be efficient in a non-welfare state. In a welfare state, though, there are high costs related to this strategy[65], as already illustrated above. Resisting managers will, therefore, have to be bought out, which increases the costs of reorganizing for the firm. Even resisting employees are protected by dismissal and severence pay-rules, unemployment benefits and public employment programs, and the social security system including early retirement plans.

k) Promoting 'change agents'.

Change agents are employees who receive a special training before the actual restructuring takes place. They are appointed or promoted to new positions throughout the firm, so that at least a few fully informed and motivated people are present in all important organizational units of the company. Promoting change agents[66] can be interpreted as shifting a firm's transfer payments or investments in employee's human capital to an earlier stage of the game. The results are an improved coordination on the one hand, plus a credible commitment because of the firm's sunk investments on the other hand. In terms of our simple model, we are shifting transfer payments to earlier stages and, thus, generating a credibility of the firm's commitment, which an ex post transfer payment would not incur. This is one of the measures which will hardly be affected by welfare-state provisions.

l) Rotating employees.

To transfer employees to new positions means taking their old status quo away from them. After they have lost their old status quo as a point of reference, they have to acquire new skills anyway. Thus, they might as well pick up the skills which are required under the new organizational design[67]. This way, employees are forced to make their investments at a fixed point in time, which might be done earlier and less reluctantly than otherwise. Offering to take a new position can be a credible signal of willingness from the employee to the owner to invest. Rotating employees, however, might also devaluate human capital, which might still be needed. A major shuffling of the workforce, however, falls under the codetermination rules in the welfare-state setting.

m) Holding excess human capital.

Continuously holding excess human capital, which means overqualified employees, increases organizational flexibility because people do not neccessarily need any extra training for the implementation of a new organizational design[68]. It presents a way to shift payments to an earlier stage of the game. It reduces the investment costs in later stages and increases the speed of

[64] Hammer and Stanton (1995), p. 133.
[65] See Shlaes (1994), p. 115.
[66] See Nanda (1996), pp. 34.
[67] See Milgrom and Roberts (1995), pp. 252 ff., and Nanda (1996), pp. 35 f.
[68] Davenport (1993), p. 107, alludes to some advantages of this strategy for change management.

adjusting to a new organizational plan, which is also equivalent to a cost reduction. In addition to this, better trained employees are more likely to have attractive outside options, so they might leave the firm by their own decision. This is an advantage to the firm if it does not want to keep that employee. The problem is that neither the owner nor the employee know ex ante what kind of skills he might need for future reorganization programs. To hold excess human capital when there is no certainty about future requirements generates extra costs, which firms as well as individuals in non-welfare states will always try to minimize.

In a welfare state like Germany, however, we are likely to find excess human capital in firms, for two reasons: firstly, the state pays for a large proportion of the investments in human capital through the public education system, and secondly, it might be attractive for firms to invest in excessive or 'reserve' human capital, trading off the high costs of dismissing insufficiently productive employees.

n) Providing training for firm-specific skills.
Providing training opportunities for employees is equivalent to paying a part of the employees' investments in firm-specific human capital shifting risk and costs away from them. The firm as well as the employee are offering a credible commitment to each other because of their investments. Paying for the employees' training is another way to raise transfer payments and shift them to earlier stages of the game. Investments in firm-specific skills are encouraged by rigid dismissal rules, but not directly supported by public programs.

o) Financing an employee's investment in non firm-specific human capital.
Paying for an employee's investments in general human capital might also be attractive for the firm. It might increase the productivity of the employee within the firm. But it might also be attractive to improve his qualification if the firm does not want to keep him: the acquisition of new skills improves his outside options on the job market[69]. Retraining him so he finds a job outside the firm might be cheaper than the settlement costs. Thus, training people the firm does not want to employ anymore is efficient as long as the training costs are lower than the settlement costs. Providing training and education for employees is encouraged by rigid dismissal rules and subsidized by public education and retraining programs.

p) Negotiating with third parties to 'hire' the firm's workers.
Trying to convince or to pay third parties to take over a firm's employees is another seemingly unorthodox strategy to get rid of excess employees. It means creating outside options for them which they would not have otherwise. It is an attractive strategy for firms which would otherwise face high settlement costs or not be able to dismiss employees at all. The third party can either be another firm of some public agency. In Germany, the state - i. e. the 'Arbeitsamt' - will often actively intervene to create this exit option for troubled firms. Sometimes, the 'Bundesanstalt für Arbeit' offers publicly financed occupational programs.

q) Offering non-monetary benefits.
The provision of non-monetary extra benefits is a means by which to encourage employees to stay in the firm and cooperate in change programs. It is equivalent to a higher transfer payment from the owner to the employee. Due to scale economies the firms might have in supplying these benefits, however, the increased benefits to the employee do not require an equivalent payment by

[69] The German army uses this strategy to get rid of excess officers.

the owner. It is a win-win game because the 'size of pie' increases in such a way that everybody is better off.

External institutions are crucial to create the opportunity to use this option of increasing incentives to facilitate organizational change. In Germany, for example, the provision of company cars by special leasing arrangements is subsidized by tax advantages. To use this option is especially attractive considering the fact that, due to higher labor costs and taxes, cars are more expensive in Germany than in the U.S. In contrast to German firms, many U.S. companies offer corporate health plans to their employees, which are important for them considering the fact that the U.S. public health system is far less comprehensive than the German one. They might also offer old age pension schemes to their employees, which cannot be transferred to other employers. Or they provide places and scholarships for an additional academic education which would be useless in Germany, where universities can, in principle, not refuse to take a student and students do not pay for their academic education. Another form of non-monetary benefits is the provision of child care and other forms of family support programs[70]. Corporate child care is more attractive to employees the higher the costs of finding alternative child care are - no matter if publicly or privately organized. If alternative forms of child care are too expensive, employees - expecially female ones - might be forced to stay at home. Other forms of potential non-monetary benefits are investment plans, assistance when moving, or real-estate deals related to relocations as well as opportunities to buy company products or products of related companies at reduced prices. Firms can, in principle, offer all those benefits which are not yet provided by the state but still highly appreciated by their workforce. Because the German and the U.S. system do not provide the same types of benefits, there are major differences between the organizational options to create incentives under the respective frameworks.

r) Tying top-management's pay to the success of reorganization.

Last but not least, the credibility of top-management's/owner's commitment to corporate restructuring is crucial to the success of such programs. Many programs fail because of a lack of commitment at top-management levels. When pursuing a top-down approach, it is by definition top-management which is ultimately responsible for the results of corporate restructuring[71]. Thus, it is a credible signal if all top-managers/owners create or accept a payment scheme for themselves which is contingent on the success of reorganization. By such a scheme, their payoff at P4 is increased, the payoffs at P1 and P3, however, are lowered - up to the point of punishment if top-managers have, like the owner in our model, invested some of their own capital in the firm. Instead of insisting on a fixed pay scheme with, perhaps, some quasi-certain bonus, top-management can suggest to receive a later payment, completely contingent on success.

Top-managers' readiness to accept highly contingent payment schemes including high personal risks seems to be much lower in Germany than in the U.S. This might be a consequence of the general 'high insurance-mentality' and high risk aversion that a welfare-state environment tends to create. A direct effect of welfare-state provisions, however, is hard to identify.

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[70] See, for example, Mainka (1995).

[71] See, for example, Davenport (1993), p. 287. For a discussion of the measurement of the success of reorganization processes see Reichwald, Höfer, and Wechselbaumer (1996).

Admittedly, this list of management tools appears rather additive. In that respect, it reflects a seemingly additive management reality. But it also reflects the common logical pattern which underlies all successful reorganization plans. Corporate restructuring requires a finely tuned combination of different kinds of tools. Knowing such tools and their effects under the respective institutional framework is therefore a neccessary precondition for designing successful reorganization plans. Such plans are systems of carefully selected and combined management tools. Using an economic model as a point of reference for estimating the effects of management tools under specific restrictions helps anticipate the partners' behavior and select the rules to control it.

4. Conclusions and Outlook

Reorganization means establishing a new, finely-tuned package of management instruments and getting rid of the old ones. The owner's task at T0 is to develop a package that is designed so that it is inherently attractive to the employee in that he gets a higher net-return from it than from alternative future settings without reorganization. Transferred to a n-person model: ***The reorganization package has to be designed in a way that each employee, who has a relevant threat point because the firm cannot reorganize itself without his cooperation, benefits from it compared to a future without reorganization.*** Employees with such threat points have to be compensated or bought out. This does not neccessarily imply huge severence pay schemes such as the ones which German Telekom is inefficiently using[72]. It is not the overall or average sum of transfers that counts, but the individual transfer that is required to meet each individual employee's contribution to value creation and his outside options. From the economic perspective of our framework, the payoff - including transfers - for cooperating or leaving the firm should not exceed what the respective employee would get from the next best future outside option. It can be nothing, for example, in a non-welfare state, if the worker's productivity does not attract an outside offer on the labor market. In a welfare state, however, an employee's outside options will c. p. be higher because of legal restrictions to dismissals and unemployment benefits which exceed what the market would pay for that employee's productivity. In general, we can conclude that it is more expensive to implement organizational change using a strict top-down approach in Germany than implementing the same strategy in the U.S. On the other hand, German welfare-state provisions support reorganization strategies that combine top-down and bottom-up elements. But these approaches, then, cannot be called reengineering as it is defined by the American coiners of the term.

From our analysis, it is hard to conclude „a welfare state offers a more favourable environment for corporate restructuring" or „it does not". Both regimes are systems of complementary elements which offer a set of strategic options to the actors whom they govern. These options, however, are not the same under different institutional frameworks. Thus, one has to be careful transfering management strategies from one regime to another. All of the 'original' literature and case studies on reengineering are based on American problems and American answers. It is very likely that in Germany not only the answers but also the questions are substantially different[73]. In Germany,

[72] See Spiegel (1996), pp. 30 f.

[73] For hints on the German tradition of corporate transformation, see Picot and Franck (1995).

welfare-state provisions form binding constraints to the application of management tools, which can successfully be used in the U.S. The same tools might, thus, be inadequate in Gemany. To find out these differences and to react to them is the task of each firms' top-management. The genuine question management should ask is: ***How can we create incentive compatible organizational structures using the specific institutional options in the respective environment?*** Reengineering failure cannot simply be blamed on 'unfavourable' institutional frameworks or cultural specificities in any given country. Otherwise, it would be hard to explain why some firms thrive while others are in decline under the same framework. There may, however, be inconsistencies and inefficiencies within a given framework. To address these is beyond the scope of this paper. They will, however, have to be addressed in order to analyze the overall effects of external shocks caused by 'globalization' on the German economy.

By the same token resistance to reengineering is no excuse for its failure. Competent top-managers can anticipate such resistance and incorporate it into the design of their plans, using appropriate management instruments. Hammer and Stanton conclude: „The real cause of reengineering failure is not the resistance itself but management's failure to deal with it"[74]. Developing some ideas on how to deal with such resistance was the aim of this paper.

5. References

Acemoglu, D./Pischke, J.-S. (1995): „Why do Firms Train? Theory and Evidence", Working Paper, M.I.T., Cambridge.

Baethge, M./Wolf, H. (1995): „Continuity and Change in the 'German Model' of Industrial Relations"; in: Locke, R./Kochan, T./Piore, M. (eds.): Employment Relations in a Changing World Economy, Cambridge/London (MIT Press), pp. 231-262.

Bradsher, K. (1996): „Cost-Cutting Strategy"; in: The New York Times, 3/17/96, pp. 1 and 19.

Brickley, J. A./Smith, C. W./Zimmerman, J. L. (1996): Organizational Architecture: A Managerial Economics Approach, Irwin Book Team.

Champy, J. (1995): Reengineering Management. The Mandate for New Leadership. Managing the Change to the Reengineered Corporation, New York (HarperBusiness).

Champy, J./Nohria, N. (eds.) (1996): Fast Forward. The Best Ideas on Managing Business Change, Boston (Harvard Business School Press).

Cushman, D. P./King, S. S. (eds.) (1995): Communicating Organizational Change. A Management Perspective, Albany (State University of New York Press).

Davenport, T. H. (1993): Process Innovation. Reengineering Work through Information Technology, Boston (Harvard Business School Press).

Economist (1996): „Redesigning the German Model"; in: The Economist 1/27/96, pp. 41-42.

[74] Hammer and Stanton (1995), p. 121.

Esping-Anderson, G. (1991): The Three Worlds of Welfare Capitalism, Princeton (Princeton University Press).

Fabrikant, G. (1996): „Investment by Delegation: the Art of Knowing Who Knows"; in: The New York Times, 3/17/96, p. 4F.

Hall, G./Rosenthal, J./Wade, J. (1994): „Reengineering: Es braucht kein Flop zu werden", in: Harvard Business Manager, 16/4, pp. 82-93.

Hammer, M./Champy, J. (1994): Reengineering the Corporation. A Manifesto for Business Revolution, New York (HarperBusiness).

Hammer, M./Stanton, S. A. (1995): The Reengineering Revolution, New York (HarperBusiness).

Handelsblatt (1996): „Arbeitsmarkt / Bundesbank fordert Reformen: Niedrige Löhne hoch belastet"; in: Handelsblatt No. 34, Febr. 16/17, 1996, p. 6.

Hundt, D./Riester, W. (1995): „Erneuerung oder Abbau", Streitgespräch zwischen Walter Riester und Dieter Hundt; in: Die Zeit No. 40, 29 Sept. 1995, p. 27.

Husted Medvec, V./Valley, K. L./Thaler, R. (1995): „Concession Aversion: A Story of Loss and Betrayal", Working Paper, Version Oct. 1995, Kellog/HBS/Univ. of. Chicago.

Kotter, J. P. (1996): „Leading Change: Why Transformation Effort Fails"; in: Champy, J./Nohria, N. (eds.): Fast Forward. The Best Ideas on Managing Business Change, Boston (Harvard Business School Press), pp. 91-103.

Lazear, E. P. (1995): Personnel Economics, Cambridge/London (MIT Press).

Ledyard, J. O. (1989): „Incentive Compatibility"; in: Eatwell, J./Milgate, M./Newman, P. (eds.): The New Palgrave: Allocation, Information, and Markets, New York/London (W. W. Norton), pp. 141-151.

Lynch, L. M. (1992): „Using Human Resources in Skill Formation: The Role of Training"; in: Kochan, T. A./Useem, M. (eds.): Transforming Organizations, New York/Oxford (Oxford University Press), pp. 139-153.

Mainka, I. (1995): „Kinderfrau? Firmensache!"; in: Die Zeit No. 42, 13 Oct. 1995, p. 100.

Marschak, T. (1989): „Organization Theory"; in: Eatwell, J./Milgate, M./Newman, P. (eds.): The New Palgrave: Allocation, Information, and Markets, New York/London (W. W. Norton), pp. 223-230.

Milgrom, P./Roberts, J. (1992): Economics, Organization, and Management, Englewood Cliffs (Prentice Hall).

Milgrom, P./Roberts, J. (1995): „Continuous Adjustment and Fundamental Change in Business Strategy and Organization"; in: Siebert, H. (Hrsg.): Trends ind Business Organization: Do Participation and Cooperation Increase Competitiveness?, Tübingen (Mohr), S. 231-264.

Moeller, B. (1996): „The Next Wave: Re-Engineering For Growth"; in: Strategy & Business, Issue 2, Winter 1996, pp. 18-32.

Nanda, A. (1996): „Implementing Organizational Change", Working Paper, Harvard Business School, Version 2/16/1996.

Nippa, M./Picot, A. (eds.) (1995): Prozeßmanagement und Reengineering. Die Praxis im deutschsprachigen Raum, Frankfurt/New York (Campus).

Picot, G. (1994): „Reorganization of Companies in Germany", in: International Business Lawyer, May 1994, pp. 223-230.

Picot, A./Franck, E. (1995): „Prozeßorganisation - Eine Bewertung der neuen Ansätze aus Sicht der Organisationslehre"; in: Nippa, M./Picot, A. (eds.): Prozeßmanagement und Reengineering. Die Praxis im deutschsprachigen Raum, Frankfurt/New York (Campus), pp. 13-38.

Reichwald, R./Höfer, C./Wechselbaumer, J. (1996): Erfolg von Reorganisationsprozessen. Leitfaden zur strategieorientierten Bewertung, Stuttgart (Schäffer-Poeschel).

Shlaes, A. (1994): „Germany's Chained Economy"; in: Foreign Affairs 73/5, pp. 109-124.

Smith, E. K. (1995): Taking Charge of Change, Reading etc. (Addison-Wesley).

Spiegel (1995): „Wunderkind als Watschenmann", in: Der Spiegel No. 2, 1/8/1996, pp. 22-34.

Streeck, W. (1995): „German Capitalism: Does It Exist? Can It Survive?", MPIFG Discussion Paper 95/5; forthcoming in: Crouch, C./Streeck, W. (eds.): Modern Capitalism or Modern Capitalisms?, London (Francis Pinter).

Theuvsen, L. (1996): „Business Reengineering. Möglichkeiten und Grenzen einer prozeßorientierten Organisationsgestaltung", in: Zeitschrift für betriebswirtschaftliche Forschung (zfbf) 48, pp. 65-82.

Unternehmerinstitut e. V. (1995): Demokratiereform. Anstöße zu einer ordnungspolitischen Diskussion, Bonn (Unternehmerinstitut e. V.).

Weinstein, M./Kochan, T. (1995): „The Limits of Diffusion: Recent Developments in Industrial Relations and Human Resource Practices in the United States"; in: Locke, R./Kochan, T./Piore, M. (eds.): Employment Relations in a Changing World Economy, Cambridge/London (MIT Press), pp. 1-31.

Williamson, O. E. (1983): „Credible Commitments: Using Hostages to Support Exchange"; reprinted in: Williamson, O. E. (1996): The Mechanisms of Governance, Oxford etc. (Oxford University Press), pp. 120-144.

Williamson, O. E. (1994): „The Institutions and Governance of Economic Development and Reform"; reprinted in: Williamson, O. E. (1996): The Mechanisms of Governance, Oxford etc. (Oxford University Press), pp. 322-343.

Wolff, B. (1995a): Organisation durch Verträge, Wiesbaden (Gabler).

Wolff, B. (1995b): „Reorganisation und ihr Scheitern: Eine ökonomische Theorie der Unternehmens-Reorganisation unter Berücksichtigung von Verteilungskonflikten", Working Paper, University of Munich.

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