AUTHORITY AND DISCRETION: TENSIONS, CREDIBLE DELEGATION, AND IMPLICATIONS FOR NEW ORGANIZATIONAL FORMS

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Abstract

We analyze a key problem in organization theory and design, namely the potential tension between authority (i.e., the power to make decisions which guide the decisions of another person) and the discretion of employees (i.e., the ability of an agent to control resources including his own human capital). The problem is rooted in the fact that in organizations, decisions rights are always loaned rather than owned; a hierarchical superior can always in principle overrule a hierarchical inferior. We provide an integrative treatment of the tensions that are involved in the interaction between authority and discretion, and the motivational problems that may result from this tension. We discuss how these problems may be checked by credible managerial commitments and other mechanisms. The framework is then applied to an analysis of new organizational forms, specifically internal hybrids. Thus, the framework adds to the understanding of the costs and benefits of alternative organizational forms.

An important problem in organization theory (including organizational economics) is the tension in organizations between *authority* — that is, the power to make decisions which guide the decisions of another person in the context of incomplete contracts and uncertainty (e.g., Coase 1937; Simon 1951, 1991) — and the *discretion* of agents, that is, the ability of an agent to control or consume resources including his own human capital (Crozier 1964; Barzel 1997; Kirsten Foss 2001) (Vancil and Buddrus 1979; Williamson 1996; Baker et al. 1999, 2001). In the interpretation that we develop in this paper, the tension arises from beneficial delegated discretion being hard to sustain under the property rights structure characterizing the firm in which delegated decision rights are always "loaned, not owned" (Baker et al. 1999), so that those who hold ultimate decision rights (i.e., authority) may use this power to renege on delegation. We argue that such reneging is likely to harm employee motivation, in turn harming organizational performance; hence, the tension between authority and delegated discretion. We analyze this tension, and argue that a number of factors, such as credible managerial commitments to not harmfully intervene, may keep the problems at bay.[1] Moreover, we develop the argument that these factors differ across organizational forms, such as traditional hierarchy and new organizational forms. In other words, the tension between authority and discretion and how (well) it is resolved helps to determine organizational form.

To illustrate the relevance of the tension between authority and discretion (as well as its application to new organizational forms), consider the much cited case of organizational turnaround in Danish hearing aids producer, Oticon A/S (Peters 1992; Morsing and Eiberg 1998) in the beginning of the 1990s. The radical organizational form that was introduced in Oticon in 1991 was a very flat one, encompassing only two hierarchical levels. It was almost entirely project-based and characterized by substantial delegation of decision rights. For example, anybody could suggest, initiate and head a product development or marketing project, or sign up to any project, the idea being to emulate the spontaneous forces of market organization — a key notion in recent work on new organizational forms (e.g., Zenger 2002). The organizational design formally implied little exercise of central authority; thus, the role of the central management committee was only to ratify or reject projects following strict and transparent criteria, as well as to monitor projects on a regular basis. However, in actuality, the CEO possessed very considerable decision-making powers, *and* exercised these by intervening in projects, closing down projects, etc. He arguably did so because he perceived certain unfortunate spillover effects of the strong delegation of discretion that characterized the Oticon spaghetti

[1] Much of our reasoning relates to the notion of trust. However, we do not use this notion because of its many

organization (e.g., employees could join as many projects as they pleased, leading to problems of allocating time). The motivation loss caused by this managerial intervention eventually led to the demise of the radical organizational form in Oticon (Nicolai Foss 2001).

The Oticon case suggests that there may be substantive implications for organizational design in the distinction between authority and discretion, perhaps particularly for the design of new organizational forms. We examine these implications, drawing on insights from various literatures, particularly 1) organizational economics (e.g., Jensen and Meckling 1992; Williamson 1996; Baker, Gibbons, and Murphy 1999, 2001) and 2) political economy work on credible commitments (Kiser and Barzel 1991; Miller 1992; Moe 1997). We also add ideas from 3) work on psychological contracts in organizations (Rousseau 1989), and extrinsic and intrinsic motivation (Thomas and Velthouse 1990; Osterloh and Frey 2000), and 4) psychological research on decision-making (Bazerman 1994).

We begin by clarifying the notions of authority and delegated discretion, provide explanations of why they (co-)exist in firms, and argue that this implies that the notion of authority should be extended beyond the narrow one of order-giving (Coase 1937; Simon 1951), in particular to also encompass the power to delegate and constrain discretion, as well as the ability to veto subordinates' decisions ("*Authority and Discretion: Literature Review and Discussion*"). Next, the interplay between authority and discretion is examined. We begin by discussing optimal delegation in a stylized framework, and then discuss the motivational problems that may arise when managers exercise authority by reneging on the delegation of discretion. This brings the factors that keep such reneging at bay into focus ("*Authority and Discretion: Tensions, Credible Commitments, and Implicit Contracts*"). We end with an application of the framework to a comparison of internal hybrids and traditional hierarchies, and discuss various managerial implications ("*Implications for New Organizational Forms*").

Authority and Discretion: Definitions and Discussion

The concept of *authority* is closely linked to the sociological literature on bureaucracy (e.g. Weber 1947; Thompson 1956). In turn, the notion of *discretion* is mainly related to the economics literature on organizations (Holmström and Milgrom 1991; Barzel 1997). Perhaps because of this disciplinary difference, the relations between the two concepts have not been extensively explored. Moreover, particularly the concept of authority comes with a multitude

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connotations, and because our discussion may only capture some of these connotations.

of meanings. In the following, we offer definitions of, and rationales for, authority and discretion.

Defining Authority and Discretion

Organization and behavioral theories, usually drawing on sociology and psychology, present a number of interpretations of authority (Weber 1921; Thompson 1956; Grandori 2002). It would be beyond the scope of this paper to present a full review and critical evaluation of the multitude of definitions and ideas regarding the concept of authority. For our purpose, the concepts of authority offered by Simon (1951, 1991) serves as a sufficient starting point.[2] Simon (1951) defines authority as obtaining when a "boss" is permitted by a "worker" to select actions, $\mathbf{A}^0 \subset \mathbf{A}$, where $\mathbf{A}$ is the set of the worker's possible behaviors. More or less authority is then simply defined as making the set $\mathbf{A}^0$ larger or smaller. Simon develops a model, where in the first period, the prospective employee decides whether to accept employment or not. In this period, none of the parties know which actions will be optimal, given circumstances. In the next period, the relevant circumstances as well as the costs and benefits associated with the various possible tasks are revealed to the employer. He then directs the worker to a task, which — for the latter to accept the assignment — must lie within his "zone of acceptance." An important feature of authority thus is that the authority of a superior is constrained by the acceptance of the subordinate of the authority.

A limitation of Simon's (1951) conceptualization of authority is that it is assumes that the employer has all the relevant information, the worker being merely a passive instrument who reacts to instructions based on this information. Such a notion is at odds with the exercise of authority in modern knowledge-based production, where employees are hired exactly because they, in some certain respects, possess knowledge that is superior to that of the employer. However, as Simon (1991: 31) himself pointed out four decades after his initial paper on authority, "[a]uthority in organizations is not used exclusively, or even mainly, to command specific actions." Rather, it is a command that takes the form of a result to be produced, a principle to be applied, or goal constraints, so that "[o]nly the end goal has been supplied by the

[2] The first organizational economics explanation of the existence of the authority relation is due to Coase (1937): In the presence of uncertainty, contingencies are costly to anticipate and describe in advance, and rather than negotiating over each contingency as they materialize and on a spot market basis, an employment contract is concluded. This contract allocates rights to the employer with respect to postponing the decision about what services to demand from the employee until the employer obtains the relevant information on which to base the decision. Simon's approach is essentially the same. These two contributions still define how economists think about authority. Later treatments (e.g., Hart 1995; Williamson 1996) mostly elaborate on the *sources* of authority in terms of ownership or the law.

command, and not the method of reaching it." However, usually some aspects of "the method of reaching" an end goal are indeed specified, so that employees are seldom granted full discretion. Rules are defined for what they can do, and routines and standard operating procedures are imposed. Now, in Simon (1951) (as well as Coase 1937), the only restrictions in the employment contract are those that are placed on the use of authority by the *employer* (i.e., the notion of "zones of acceptance"). However, there are other restrictions in the employment relation, namely constraints on the decision rights that are granted to employees (Holmström and Milgrom 1991; Jensen and Meckling 1992; Barzel 1997; Holmström 1999). Many kinds of management controls may be interpreted as defining, and redefining, the constraints on the decision rights allocated to employees. This suggests a second important function for authority, namely to delegate and constrain discretion. This function is exercised in order to minimize costs associated with unwanted spillover effects (i.e., externalities) that arise when decision-making is interdependent and employees have *discretion*.

Why Discretion?

We define discretion as the ability of an agent to control or consume alienable resources over which she does not have formal ownership or control the services of her own human capital (Barzel 1997); in other words, "discretion" does not encompass control over other employees (we justify this later). "Control" is a key word here. An agent has control over a resource (including his own labor services) when he is able to allocate that resource to a purpose that he, for whatever reason, finds suitable.

While the aim of this paper is to examine the interaction between authority and discretion, we need to first discuss why authority and discretion exist in firms. We concentrate on spelling out the costs and benefits of discretion, because our (expanded) notion of authority centers on maximizing the net benefits of discretion through the setting of constraints (including the setting of goals and vetoing subordinates' decisions). Our point of departure is the economics of organization. In this body of literature, discretion is usually treated as the source of moral hazard, and thus as a factor that reduces joint surplus value in relationships. This makes it puzzling why discretion should ever be delegated. However, some tasks may inherently require the participation of more than one person, which necessitates some delegation of discretion. Also, delegation may be chosen for reasons of economizing with managers' time (i.e., the opportunity costs of managerial inputs). In addition to these two basic reasons, there are four more reasons why firms may rationally decide to delegate, namely because of expert knowledge, learning, distributed judgment, and intrinsic motivation.[3] Consider each in turn.

The argument from *expert knowledge* begins from the observation that the employee may be better informed than the manager with respect to how certain tasks should (optimally) be carried out. Often such superior knowledge is costly to communicate to the manager (Casson 1994; Melumad et al. 1995). Efficient co-location of decision-making rights and knowledge then requires that employees are delegated discretion with respect to how they use their expertise in problem-solving.

According to the argument from *learning*, delegating discretion to employees will not only lead to a better use of the knowledge that they already control, but also to the discovery of *new* knowledge that they would not discover in the absence of delegation (Miles et al. 1997). For example, an employee in the sales department may be delegated the right to make improvements on the sales material, change what is displayed in the firm's showrooms, etc., and thereby discover new sales concepts and methods. In other words, the argument stresses new explorative efforts rather than merely improved exploitation of existing knowledge. In particular, much of the discussion of Total Quality Management has stressed that delegation of rights to TQM teams leads to improved problem-solving efforts, that is, to a more efficient process of discovery of solutions to technical and marketing related problems (e.g., Jensen and Wruck 1994 and references therein).

The *distributed judgment* argument compares centralized with decentralized judgment and decision-making (Bendor 1985; Sah and Stiglitz 1985; Miller 1992; Argyres and Mui 1999). A general conclusion is that in cases that call for decisions based on judgment, "… dictatorship may do very poorly when the problem is one of making collective judgements about difficult problems" (Miller 1992: 77). By means of probability theory, Bendor (1985) shows that agents working separately on problems are sometimes more likely to produce workable results than having agents working interactively on a problem. In this case, delegating discretion amounts to giving employees the right to put forward proposals about collective judgments based on their individual judgments and to decide between these.

Finally, the argument from *intrinsic motivation* stresses that increasing the delegation of discretion to employees likely "… raises the perceived self-determination of employees and

[3] Delegation is arguably also undertaken because it eases the provision of high-powered incentives. However, delegation aiming at strengthening incentives requires that the organization is decomposable into rather modular

therewith strengthens intrinsic motivation" (Osterloh and Frey 2000: 543), leading to an increase in creativity in the pursuit of goals. Expert knowledge is better utilized and learning is fostered. In contrast, decreasing the level of delegated discretion may crowd out intrinsic motivation. Much of the empowerment literature has a similar thrust (Conger and Canungo 1988; Vroom and Jago 1988; Thomas and Velthouse 1990; Gal-Or and Amit 1998).

Note that none of the above arguments consider the trade-offs involved in delegation of discretion. Thus, they cannot explain why discretion should be constrained. Relatedly, much recent work on new organizational forms (e.g., Osterloh and Frey 2000; Child and McGrath 2001), as well as the literature on empowerment (Conger and Kanungo 1988; Thomas and Velthouse 1990) tend to emphasize the benefit, rather than the cost, side of delegation (but see Vroom and Jago 1988 for an exception). However, writers within the agency literature address the issue of optimum delegation (Jensen and Meckling 1992; Armstrong 1994; Gal-Or and Amit 1998). In general, they conclude that delegation creates opportunities for employees to collect informational rents and/or engage in morally hazardous activities. Roughly, optimum delegation obtains when the incremental gain from making use of expert knowledge equals the incremental costs from loss of control. The cost caused by control loss is ultimately only rooted in the differing preferences of managers and employees in the relevant hierarchy and the costs of monitoring relevant aspects of the employee's activities. Thus, the agency approach abstracts from costs of delegation of discretion that are not the result of moral hazard, but which may still arise in systems of interdependent decision-making. As a crude generalization, the less decomposable (i.e., the more complex) (Simon 1962) such systems are, the more such costs are likely to be present. Among the costs of delegation in complex firms are the following ones:

Common goods problems. These are problems of overuse of assets and other inefficiencies that develop when delegated rights to use the relevant assets are imperfectly specificed and/or monitored. Such problems may arise in an organizational context when discretion is delegated to employees. First-come/first-served and other mechanisms arise to allocate the services of the assets in the presence of delegation of use rights. However, such mechanisms may be inefficient compared to allocation by means of authority.

Problems of mutual adaptation. These are problems of coordinating actions, typically in response to some contingency, that include problems of scheduling and other problems that arise when complementary actions are involved. Problems of excessive information collection

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components (Zenger 2002). Thus, it is decomposability rather than delegation that paves the way for the use of high-powered incentives.

(Casson 1994) (including duplicative R&D) also fall within this category. While these problems may be handled through, for example, communication, such mechanisms may be less efficient than authority. Mutual adaptation may be particularly ill-suited to handle situations where a firm is trying to coordinate actions in an effort to do something "… that is outside its experience, such as introducing a new kind of product, entering a new market, or adopting a new approach to manufacturing" (Milgrom and Roberts 1992: 92).

Subgoal pursuit. The results of subgoal include cannibalization of product markets and other instances of decentralized actions being inconsistent with the firm's overall strategic planning. These mistakes may be made by entirely well-intentioned employees (cf. Hendry 2002). The reduction of subgoal pursuit is conventionally seen as a key management task.

The Interaction Between Authority and Discretion

In much of the literature, there has been a tendency to discuss the issues of authority and discretion separately.[4] However, this is problematic because the interaction between authority and discretion gives rise to distinct organizational problems. Thus, complex firms may have intrinsically motivated employees and/or employees with a direct financial stake in the outcomes of activities that they through delegated discretion are able to influence. On the other hand, managers acting in the (possibly justified) belief that they possess superior knowledge about the nature of the interdependencies in the organization exercise authority in order to improve coordination. However, this may clash with one of the main supposed benefits of delegation, namely the improvement of motivation. This is the fundamental tension between authority and discretion. We treat this and its organizational implications in the following sections.

Authority and Discretion: Tensions, Credible Commitments, and Implicit Contracts

In this section we begin by illustrating by means of a simple graphical framework a basic tradeoff that arises in the allocation of discretion. We then examine reasons why managers may intervene and overrule decisions made on the basis of delegated discretion, and how this

[4] The economics of organization offer explanations of both authority and discretion. However, these are forwarded separately, and the interaction between authority and discretion is seldom inquired into. Aghion and Tirole (1997) and Baker et al. (1999) are exceptions to this. Agency theory may seem to allow for this interaction, but can only treat authority in the very narrow sense of monitoring, which is clearly an aspect of the exercise of authority (e.g., Melumad et al. 1995).

may harm motivation. We finally address the various means, such as explicit credible commitments and implicit contracts, through which harmful managerial intervention may be circumscribed. It is necessary to state some simplifying assumptions that we make in the following: 1) *What is delegated?* Delegation only encompasses delegation of discretion, not of authority. We make this simplifying assumption in order to highlight the interaction between authority and discretion, and avoid complicating issues of delegation of authority, which do not seem to add extra content to the analysis. 2) *The sources of discretion:* We assume that discretion is delegated by managers who have the power to implement their preferred degree of discretion. For reasons of tractability, we suppress that discretion may be *captured* by employees, for example, because they have the bargaining power that allows them to do so (Aoki 1984). 3) *Levels of analysis*. We assume that if one employee is overruled, this will have negative motivational consequences for all employees. This establishes a link between the organizational level and the individual level. These assumptions may be strong ones; however, they are necessary for keeping the discussion simple and allow us to highlight the interaction between authority and discretion. However, we later relax these assumptions.

Delegating and Changing Discretion

As argued earlier, there are both beneficial and negative implications for firms of delegating discretion to employees. Thus, firms confront a basic trade-off that may be illustrated as in figure 1.

XXXXXXXX Insert Figure 1 Here XXXXXXXX

On the horizontal axis is the degree of discretion delegated to an employee or a business unit. This may be interpreted as a composite measure of a host of variables, such as job-descriptions (which in themselves may contain many variables), monetary budgets (Jensen and Meckling 1992), rights to work with certain assets (Rajan and Zingales 1998), rights to communicate with and refer to other employees (Demski et al. 1997), rights to define goals for activities (Armstrong 1994), rights to initiate projects (Fama and Jensen 1983; Aghion and Tirole 1997), etc. Clearly, because of the multi-dimensionality of discretion, representing it as a one-dimensional measure is quite crude. The vertical axis shows costs and benefits measured in some unit (e.g., Dollars).

The B-curve shows the benefits from increasing delegation. We assume that employees value being given more discretion, and that this increases their productivity. This may be explained by employees becoming more intrinsically motivated or by employees being able to reap more private benefits (e.g., augmenting their human capital) as delegation increases. The relation is portrayed as a strictly concave one, because we assume that the manager first allocates discretion to employees in the most productive dimensions.[5] There is also a cost aspect to giving the employee larger discretion, as discussed above. The C-curve shows these costs. The curve is assumed to be convex, because as delegation increases, decision rights will increasingly overlap across tasks and functions, leading to the costs of delegation of discretion increasing at an increasing rate.

Note that spillover effects are an important part of the construction of the B and C curves. In the case of the B curve, spillover effects enter in the form of the four rationales that we provided above for delegating discretion. In the case of the C curve, spillover effects enter, for example, in the form of moral hazard in addition to the costs identified earlier.

Given the B and C curves, the optimum degree of delegation is given by D_1*. Here, the difference (i.e., the joint surplus) between costs (C curve) and benefits (B1) is at its maximum. We take this situation as our benchmark situation. We suppress the learning or evolutionary process that leads to this, as well as any exercise of power on the part of employees that may hinder reaching the optimum. There are four overall reasons why the degree of delegation preferred and implemented by management may deviate from D_1*, that is, the one that maximizes the organization's performance. First, management may decide that the degree of delegation should change as a response to *changing outside contingencies*. Second, management may *change its perceptions* of the firm's overall strategy and the internal resource allocation (including the degree of delegation) that may support this strategy. Third, management may realize *private benefits* from deviating from the degree of delegation that is optimal for the firm. Finally, management may suffer from *time inconsistency*. These are considered in the following.

Changing outside contingencies. We assume that the firm is initially in equilibrium with respect to the degree of delegation. Changing contingencies upset this equilibrium, because it introduces new kinds of interdependencies in decision-making, thus requiring adaptation in terms of the delegation of discretion. For example, outside technological change may require the building-up of a new product platform. Such new technologies typically require new interface standards, which may require the delegation of more discretion to designers and engineers in order to stimulate exploration through wide bandwidth

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[5] "Manager" may be substituted with "corporate headquarters," "CEO," etc. "Employee" may be substituted with "business unit," "team," etc.

communication channels. Or, a change in the competitive conditions, such as an impending price war, may dictate that discretion is diminished in order to curb slack and reduce costs. If such changes in contingencies could be foreseen, changes in the delegation of discretion could be fully programmed. However, many contingencies cannot be foreseen, or it is too costly to try to do so. Because complex interdependencies in decision-making may still exist even under substantial delegation,[6] major changes in contingencies are likely to require coordinated adaptation; thus, there may still be a need for the exercise of authority. Disregarding for the moment negative motivation effects, coordination by means of authority is preferable when management has a superior understanding of how contingencies influence interdependencies and how this impacts on the preferred degree of delegation. When contingencies change frequently, the exercise of authority with respect to defining and redefining the degree of delegation will be a recurrent task. Since there may be learning and scale-advantages in this activity and since the relevant underlying knowledge will be costly to communicate (Casson 1994), this kind of exercise of authority will be concentrated on specific persons.

Changing managerial perceptions. The degree of delegation may change because of changed managerial perceptions, even if no outside contingencies change. For example, a change in the management team may cause the team's "image" (Penrose 1959) of the firm's opportunity set to change. This situation introduces the same kind of changes in the internal resource allocation, including the degree of delegation that was analyzed above.

Private benefits. In the above two cases, management was assumed to act in the interests of the firm. However, in actuality, managers may derive private benefits from actions that destroy value. This may imply that their preferred degree of delegation deviates from the optimum. In particular, time patterns of organizational and private costs and benefits may be such that managers have incentives to choose sub-optimal actions. For example, managers who are up for promotion may derive private benefits from reducing delegation so as to strongly cut the costs of the slack and negative spillover effects associated with a high level of delegation of discretion, because this is a signal of their managerial ability. If the organizational (and private) costs of this come later than the private benefits to managers, the latter have an incentive to reduce the level of delegation below the optimum. Incentive schemes (e.g., stock options) that tie behavior to organizational performance may not be able to cope with this problem, because managers may have left the firm or the position in favor of another firm or position.

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[6] Indeed, delegation may introduce *more* interdependencies between organizational units. For example, delegation may imply more extensive interaction with other organizational units. Also, delegation may imply

Time inconsistency. The problem of time inconsistency is well known from political economy (e.g., Kiser and Barzel 1991; Moe 1997). For example, governments have an incentive to *initially* promise to not confiscate (too much of) the wealth created by entrepreneurs in order to strengthen their incentives to actually undertake investments, and *then*, in some later period, deviate from this promise and confiscate substantial portions of the created wealth. Along similar lines, firms may induce employees to undertake investments in their human capital that are specific to the firm, promising that employees will be able to share substantially in the extra surplus. When the human capital of employees is sufficiently specific, firms may then renege on the promise, holding-up employees. In the context of delegation, this kind of behavior may consist in, first, promising substantial discretion. When employees, happy with their new extended discretion, come up with profit-improving ideas about how to improve products, processes, etc., managers may harvest these, decide that the organization already has its hands full with implementing the ideas, and that the level of delegated discretion may be usefully reduced in order to save costs.

Managerial Intervention and Employee Motivation

The managerial exercise of authority may harm employee motivation in two overall ways, namely, first, when employees, making decisions on the basis of discretion delegated to them, are overruled by managers, and, second, when the delegation of discretion is limited in ways that are perceived by employees to be unjust, arbitrary, etc. Both kinds of exercise of authority amount to reneging on implicit contracts with employees. They may be seen as instances of "managerial opportunism" (Dow 1987). Unfortunate consequences for motivation, and in turn firm performance, may follow.

Work in organizational behavior on psychological contracts (Rousseau 1989) has implications for understanding how the use of authority which is being perceived by employees as being unfair, arbitrary, and in other ways break what is regarded as established psychological or implicit contracts, may harm motivation.[7] The psychological literature on cognitive biases suggests further reasons why motivation may be harmed by managerial action. In an employee relationship, employees develop implicit and explicit expectations to the contract governing the relationship, and particularly to the benefits that they believe they

more extensive rights to draw on corporate resources (e.g., as in a matrix organization).

[7] In particular, "organizational citizenship behavior" — that is, employee behavior which promotes organizational efficiency but is not (perhaps, cannot be) explicitly recognized by an organization's reward system — may suffer from this kind of action (Robinson and Morrison 1995).

deserve under the implicit contract, that is, their "entitlements" (Heath et al. 1993). For example, the level of discretion represented by D_1* may become a "status quo" point, in the sense that it represents what employees believe are their entitlements. Thus, if employs enjoy considerable discretion this may become part of their (perceived) entitlements. Other parts of psychological research points to the phenomenon of loss aversion, that is, a loss relative to a status quo point is seen as more undesirable than a gain relative to the same point is seen as desirable. This means that employees will develop a bias against changing the level of discretion in a downwards direction, and that they can be expected to resist such changes, as well as suffer a loss of motivation if the change is, in fact, forced upon them. Because of these psychological effects, managerial overruling of employees is likely to harm intrinsic motivation, as well as employees' willingness to learn, exploit their local knowledge and willingness to offer their opinions and judgments on organizational development. Recall that these are the determinants of the B curve. Thus, motivation losses caused by managerial intervention may be represented in figure 1 by B_1* shifting to B_2*, which corresponds to a lower level of discretion and lower joint surplus. Thus, employees cut back on efforts. In a longer-run perspective they may also lower their investments in accumulating firm-specific human capital.

The problem of loss of motivation caused by managerial overruling is related, though not identical, to what Williamson (1996) calls the "impossibility of selective intervention." He motivates this problem by asking

> … "Why can't a large firm do everything that a collection of small firms can and more." By merely replicating the market the firm can do no worse than the market. And if the firm can intervene selectively (namely, intervene always but only when expected net gains can be projected), then the firm will sometimes do better. Taken together, the firm will do at least as well as, and will sometimes do better than, the market (1996:150).

In terms of figure 1, selective intervention would thus mean that a manager could selective intervene to lower the C curve, while keeping the B curve unchanged. However, Williamson directly argues that selective intervention of this kind is "impossible." This has to with issues of, "Why aren't more degrees of freedom always better than less?" (idem.), that is, why isn't maximum freedom to exercise authority always preferred? Suppose such maximum freedom obtained. In this situation, employees' motivation may suffer, because the option to intervene (i.e., exercise authority) "… can be exercised both for good cause (to support expected net gains) and for bad (to support the subgoals of the intervenor)" (Williamson 1996: 150-151). In fact, promises to only intervene for good cause can never be credible, Williamson argues, because they are not enforceable in a court of law. A number of pertinent insights emerge from this line of analysis.

First, it may be very difficult for employees to distinguish between the exercise of authority that is motivated by "good causes" (i.e., adaptation to outside contingencies, adopting new strategies, curbing public good problems and subgoal pursuit) and the kind that is motivated by "bad causes" (i.e., private benefits and time inconsistency). This is not to say that it is impossible for employees to make the distinction. Conflicts over resources between employees may arise, and managerial decisions that mitigate these conflicts may be fully respected by the involved parties as means of arbitration. Moreover, exercise of authority that harms employees (e.g., leads to layoffs) may still not lead to a drop in motivation, particularly in times of a severe organizational crisis. However, there is a substantial intermediate range where it is costly for employee to ascertain whether authority is in fact exercised for good or for bad causes. The implication is that to the extent that management wishes to not harm motivation, it must accept that it will to forego some good reasons for intervention to avoid these being mistaken by employees for intervention for bad reasons. Thus, there is a fundamental tradeoff here.

Second, an important issue is under which conditions delegation is credible. Williamson argues that promises to only exercise authority for good causes are not credible, because they are not court-enforceable. Similarly, promises to delegate and not to interfere with this delegation are not court-enforceable, either. In other words, delegation is not formally contractible. This may seem to imply that authority and discretion can only reside at the top, since they cannot credibly be delegated. This would seem to imply that we should witness little or no use of delegation. However, we do observe delegation that is long-lasting, stable and credible. This implies that although delegation may not be court-enforceable, it can be enforced by other means (Baker, Gibbons, and Murphy 1999, 2001), like other implicit contracts (Klein and Leffler 1981). We discuss this latter issue in the following section.

The Enforcement of Credible Delegation

So far, it has been suggested that the exercise of authority that is perceived as being unfair, arbitrary, ungrounded, overruling, etc. may badly harm motivation, so that, in terms of figure 1, the benefit curve is shifted from B_1* to B_2*. However, as the figure shows, this shift is associated with a diminished joint surplus. It was argued earlier that for various reasons managers may exercise authority in ways that deviate from the optimum, using the example of choosing inoptimal levels of delegation. The same kind of reasoning applies to managerial action that overrules employees (keeping the formal level of delegation constant). Clearly, it is in the firm's long-run interest to avoid this kind of managerial behavior. There are a number of ways in which this may be accomplished. First, management may establish *credible commitments* to not break promises with respect to delegation). Second, various *organization-specific factors* may make it too costly for management to exercise authority that may harm motivation, irrespective of whether explicit commitments have been issued. Third, *outside forces* may constrain the harmful exercise of authority.

Credible commitments. In the present context, the political economy concept of credible commitment implies that management explicitly commits to a non-interference policy, and this is made credible by means of somehow constraining the flexibility of managers. Notably, managers may *stake their personal reputations* (Miller 1992; Argyres and Mui 1999). This may be done through symbolic and communicative acts, for example, announcing in large-scale company gatherings one's firm commitment to certain policies and values (Brockner et al. 1992). It can also be done through *consistently* abstaining from harmful intervention (Kiser and Barzel 1991). The latter possibility suggests that *if* management for some reason wishes to break implicit contracts through harmful exercise of authority, they should do so in the initial period, and abstain from any such actions in all later periods.

However, credible commitments are far from perfect with respect to constraining opportunistic behaviors (Williamson 1996). For example, there is a "last-period problem" (Klein and Leffler 1991), because managers change jobs and may not carry their reputation with them, or may be close to retirement. Moreover, many firms are so large and complex that the informational requirements for the effective working of reputation effects are not met. This may particularly hold for middle managers that are much less visible than top managers. The effect is to dampen the commitment creating effect of reputations. This reasoning predicts that we would expect relatively more harmful exercise of authority from managers who are about to change jobs or retire or occupy middle-management positions. Also, unexpected contingencies — for example, some new open promotion possibility arrives unexpectedly and seizing it may be eased by a tough stance towards costs — may mean that management faces situations where the benefits of breaking commitments overwhelm the costs, even in the long run. (i.e., the implicit contracts are driven out of their self-enforcing range, Klein 1991).

Organization-specific factors. Even if no explicit commitments to not engage in harmful exercise of authority are issued, there are still a number of features of the organization of the firm that may serve as credible commitments.

First, *hierarchical structure* itself plays a role. Thus, delegated discretion may be partly protected if lower level managers are required to refer to higher-level managers for authorization to overrule decisions made by of employee's. This will be case if upper and lower-level managers differ in their *preferences for overruling*, for example, lower-level managers derive a private benefit from overruling, whereas upper-level managers do not (Aghion and Tirole 1997). Another reason why hierarchical structure may constrain managerial intervention is that the hierarchy is not just a structure of authority, but also one of information (Thompson 1967; Galbraith 1974). Thus, there will be an *informational distance* between those possessing authority and those to whom discretion has been delegated. The size of this informational distance influences the basis for exercising judgment with respect to decisions whether to overrule employees or not. All else being equal, the more hierarchical layers that information has to pass through before reaching the level exercising authority, the less adequate is this basis likely to be. Moreover, even though there may be few hierarchical layers, managerial task descriptions may be such that managers will essentially be *overloaded* if they insist on being sufficiently informed to be in a position to overrule. If a manager understands that because of information overload, she is not in a position to rationally decide whether to overrule or not, she should not overrule (Aghion and Tirole 1997). In sum, this reasoning predicts that overruling of employees is less likely to place in firms with large informational distances and/or managers that are heavily burdened informationally.

Some employees or groups of employee may also be particularly costly for management to overrule, because their discretion is not only formally delegated, but also strongly grounded in the *real control of critical resources*, notably specialized human capital, ability to charismatic leadership, a favorable reputation with certain customers, etc. For example, Henry Ford II and the rest of the Ford top management team tolerated the open disagreement with official Ford strategy expressed by Lee Iacocca and his clique of loyal managers, because of the marketing skills exercised by Iacocca and his men (Halberstam 1986).

Finally, the firms's *reward systems* may play a role. Notably, it may be more costly for a manager in terms of lost motivation if he overrules employees whose rewards are dependent upon results — for example, rewards may be dependent upon team-output — than if he overrules employees who are paid a fixed wage. This is because the results on which the employee's rewards depend may never materialize if the manager overrules him. In contrast, an employee that is on a fixed wage contract will receive the same salary regardless of whether he is overruled or not.[8] In sum, the more "high-powered" the incentive systems, the less managerial overruling we would expect to see.

Outside forces. With respect to outside forces that may enforce the delegation of discretion, important examples are *strong trade unions* or *professional associations*. Their influence may imply that certain rights are so strongly protected (i.e., they are outside the "zone of acceptance," Simon 1951) that management cannot realistically change these (Argyres and Liebeskind 1999). For example, employees may gain informal rights to influence the planning of the weekly work schedules (i.e., informal delegation of discretion), and trade unions may effectively enforce these rights. *Competitive forces* also constrain harmful managerial exercise of authority. In particular, competition for employees is an important constraint. Thus, frustrated employees are more likely to be bid away by competitor firms. Moreover, financial markets constrain harmful managerial exercise of authority, as least as a rough tendency, because these actions have a negative impact on profitability.

Summing Up

So far we have identified variables that determine the costs and benefits of delegation of discretion (suppressing the problems stemming from managerial intervention), as well as variables that influence the propensity of managers to intervene in delegated discretion, and, finally, a set of variables that influence the enforceability of implicit contracts and explicit commitments to not intervene in this manner. Our framework may be summed up as in figure 2.

XXXXXXXX Insert Figure 2 Here XXXXXXXX

Recall our earlier argument that the set of variables that influence the enforceability of implicit contracts and explicit commitments to not intervene in a harmful manner differs across organizational forms. This suggests that important parts of the organizational costs associated with alternative organizational forms are 1) the costs stemming from harmful managerial intervention, and 2) the costs of establishing implicit contracts and explicit commitments to not intervene. In the following section, we apply this framework to a comparison of the traditional Weberian hierarchy to new organizational forms.

Implications for New Organizational Forms

[8] Issues of intrinsic motivation may clearly complicate the situation. The motivation of intrinsically motivated employees that are on a flat wage may be harmed as badly by overruling as extrinsically motivated employees

An Organizational Dilemma?

The above analysis seems to imply that organizations are unavoidably caught in a fundamental dilemma. Thus, the analysis implies that a basic organizational choice is one between organizations with constant managerial intervention to ensure adaptation, but highly frustrated employees, on the one hand, and very rigid organizations with highly motivated employees on the other hand. However, this dilemma may be resolved in two ways. The obvious way is that the organization is placed in environments that are so stable that there is not much need for managerial exercise of authority. The less obvious way is that by making the organization more decomposed (Simon 1962) better adaptability can be achieved with less need for intervention on the part of management, so that motivation is not harmed. It is exactly the property of improving adaptability while keeping motivation constant, or even improving it, that some writers argue characterize "new organizational forms" (Miles et al. 1997), a subset of which we analyze in this section.

New Organizational Forms

Many writers have noted that firms, particularly those in knowledge-intensive industries, are increasingly experimenting with the ways in which they structure their boundaries (e.g., Helper, MacDuffie and Sabel 2000) and their internal organization (e.g., Miles et al. 1997). They do this in order to increase their ability to absorb and build knowledge, so as to become "information age organizations" (Mendelsson and Pillai 1999). These experiments with economic organization are often referred to by the notion of "new organizational form" (Daft and Lewin 1993). New organizational forms may be classified as either external hybrids (Williamson 1996), that is, market exchanges infused with elements of hierarchical control, or internal hybrids (Zenger and Hesterly 1997; Zenger 2002), that is, hierarchical forms infused with elements of market control. "Market control" is to be understood in a broad sense to not just refer to internal prices and the use of high-powered performance schemes, but also to encompass delegation, stimulation of local entrepreneurial initiative, the use of semi-independent teams, etc., and other organizational elements that mimic market organization. Thus, in the context of internal organization, these forms are characterized by relying upon cross-functional processes, extensive delayering, and empowerment (Child and McGrath 2001: 137). The aim is to create highly specialized and motivated units by means of extensive delegation of discretion. Cross-functional processes substitute for hierarchy in the coordination

that receive performance pay.

of tasks. Some writers (e.g., Ravasi and Verona 2000) argue that a main benefit of new organizational forms is that they introduce "structural ambiguity" (i.e., unclear and/overlapping tasks and roles), which further creativity, knowledge sharing and innovativeness, but also complicates coordinating tasks. Here, we apply the preceding discussion to new organizational forms. Specifically, we concentrate on internal hybrids with a high degree of delegation of discretion, and compare these to more traditional hierarchies.[9]

Delegation of Discretion and Interdependencies in Internal Hybrids

Internal hybrids increase the level of delegation of discretion compared to the traditional hierarchical form (Child and McGrath 2001). Much of the design philosophy behind new organizational forms is to enable effective local adaptation, for example, to changes in customers' needs, specifications, etc. by means of this. Accordingly, much of the literature stresses the autonomy, independence, etc. of organizational units. Although certain internal hybrids may represent more decomposed organizational forms than traditional hierarchical forms, some interdependencies between units persist. Authority may be a low-cost way of handling such interdependencies, that is, "intervention for good causes."

The literature on internal hybrid forms is not clear with respect to how interdependencies are managed, perhaps because it is usually not made clear how decomposed these organizational forms really are. Two somewhat opposed accounts can be found. *On the one hand*, it is argued that employees in new organizational forms are knowledgeable, multi-skilled and motivated, but still agree upon goals. In terms of figure 1, this implies that the C curve is flat. Given this, the scope for coordination of interdependent activities by means of authority may indeed be quite limited. Management merely plays the role of mediating with respect to goals and conflicts (Child and McGrath 2001: 1138). *On the other hand*, specialization is strongly stressed, with a strong emphasis on breaking the organization up in small, semi-independent and specialized units that work on the basis of localized, specialized and even tacit knowledge. Given the latter characterization of the organization, coordination problems are bound to arise, for example, because sub-goal pursuit becomes pronounced. In terms of figure 1, this implies that the C curve is steep.

As discussed earlier, some coordination problems may be efficiently handled by organizational units themselves, namely when the costs of resolving coordination problems by

[9] Note that as we use the terminology of "internal hybrids" this excludes the traditional M-form, notably because the traditional M-form does not use cross-functional teams. Radical matrix forms may, however, be internal hybrids in our sense.

dialogue and mutual adaptation are lower than the costs of using the authority mechanism. The greater the extent to which complex interdependencies characterizes the organization, the less likely is it that coordination problems will be efficiently handled through dialogue and mutual adaptation. This paves the way for the exercise of authority as a means to resolve coordination problems, that is, intervention for good causes. In addition, new organizational forms are not immune to problems that stem from intervention for bad causes. This implies that we can utilize the insights developed in the preceding sections to analyze new organizational forms in terms of how well they cope with these problems relative to other organizational forms, such as traditional hierarchies.

Comparing Traditional Hierarchies and Internal Hybrids

It was earlier argued that there are a number of factors that may enforce promises or implicit contracts with respect to not exercising authority in a harmful (i.e., de-motivating) manner. We submit that the incidence of these factors differ systematically across organizational forms. Thus, Table 1 presents how we hypothesize the incidence of the factors in internal hybrids (as defined above) and traditional hierarchies. By the latter we make reference to organizations characterized by fixed roles, fixed lines of communication and command, multiple layers of authority, functional specialization, the resolution of unexpected contingencies being referred to a hierarchical superior, and low-powered incentives. This incidence is measured on the scale (0, +, ++) with intermediate values given as, for example (0/+). In the following, reasons are provided for the specific values in the cells. We emphasize that the specific values are highly conjectural and depend on contextual factors, such as how exactly a given internal hybrid is structured.

XXXXXXXX Insert Table 1 Here XXXXXXXX

Credible commitments. Credible commitments in the form of managers staking personal reputations with respect to not overrule employees are more difficult to establish in internal hybrids than in traditional hierarchies. In the latter, roles and positions are well established and it is, in principle, easy to ascertain which manager overruled a given decision. In contrast, in internal hybrids authority is more dispersed. For example, in some kinds of project organization, decisions may be overruled, not just by the project leader, but also by various managers who are associated with the project and have stakes in it. This implies that it is more costly for employees to ascertain the reputation of a given manager. Because reputational mechanisms are more imperfect in internal hybrids, this is a force pulling towards more harmful managerial exercise of authority.

Differing preferences in the managerial hierarchy. A key difference between traditional hierarchies and internal hybrids lies in the number of hierarchical layers: It is lower in the latter than in the former. A factor that reduces the probability of being overruled is having a hierarchy with managers with differing preferences with respect to the exercise of authority. Because internal hybrids make use of less hierarchy than traditional hierarchies, this mechanism will be less prevalent in internal hybrids. This is a force pulling towards more harmful managerial exercise of authority

Information structure. Information structures are quite different in traditional hierarchies and in internal hybrids. Thus, in the traditional hierarchy, communication structures span multiple layers of hierarchy; some information loss as decisions move up the hierarchy is unavoidable. In the internal hybrid, information loss is likely lower, because the number of hierarchical layers is lower. In internal hybrids, managers will therefore have a better informational basis for exercising their authority. Again, this is a force pulling towards more harmful managerial exercise of authority in internal hybrids.

Critical resources. In general, managers will be reluctant to overrule employees who control critical resources, particularly the less specific these employees are to the firm. This mechanism is more likely to be present in internal hybrids than in traditional hierarchies. In fact, a motivation for adopting internal hybrids is exactly to make use of employees' critical knowledge resources. The control of critical resources gives employees more bargaining power (Rajan and Zingales 1998) and makes it more costly for a manager to overrule them. This is a force pulling towards less harmful managerial exercise of authority in internal hybrids relative to traditional hierarchies.

Reward systems. These are usually higher-powered in internal hybrids than in traditional hierarchies (Zenger 2002). This means that more will be at stake for employees if they are overruled. This is a force pulling towards less harmful managerial exercise of authority in internal hybrids.

Trade unions and professional associations. The traditional hierarchy is more likely than the internal hybrid to be found in traditional industries than in new services, software development, E-business and the like. Trade unions and professional associations are more prevalent as outside enforcers of internal, perhaps implicit, agreements in more traditional industries. This is a force pulling towards less harmful managerial exercise of authority in traditional hierarchies.

Competitive forces. Competitive forces constrain managerial intervention most directly through capital and labor markets. The constraining effects of labor markets may be strongest in the case of internal hybrids, since these are often based on specialist employees who may be in very strong demand. It does not seem possible to say anything definite on *a priori* grounds about the constraining effects of capital markets, since this seems to be entirely contextually determined. The overall effect of competitive forces with respect to discriminating between traditional hierarchy and internal hybrids in terms of harmful managerial exercise of authority is, therefore, indeterminate.

The above considerations are not sufficient to determine whether there will be more or less harmful managerial exercise of authority in a traditional hierarchy relative to an internal hybrid. This is because we do not know on *a priori* grounds the relative contribution of the various factors to the enforcement of implicit contracts and explicit commitments (e.g., are reward systems more important than trade unions?). Ultimately, this can only be settled on empirical grounds. Still, it may be hypothesized that it is more costly to sustain commitments and implicit contracts to not exercise authority for bad causes in an internal hybrid than in a traditional hierarchy. We offer the following reasons in support of this contention. First, design principles for a traditional hierarchy are better understood and disseminated than for internal hybrids. This means that designing an internal hybrid is more uncertain and that more design errors are likely to take place. Such errors (e.g., in the allocation of discretion) are likely to be corrected by subsequent management action. Second, tasks and task definitions are usually more unclearly defined in internal hybrids; in fact, this is sometimes mentioned as a benefit of internal hybrids (Ravasi and Verona 2000). However, there is also a cost side to this, namely negative spillover effects, requiring subsequent management action. Our intuition is that these are sufficient to tilt the balance, so that on average, there will be more potentially harmful exercise of authority in internal hybrids than in traditional hierarchies.

We strongly emphasize that our arguments does *not* imply that internal hybrids may never be preferred organizational forms. First, although internal hybrids may indeed suffer relatively more from the problem of harmful managerial intervention than traditional hierarchies, and therefore in general be less stable, they may possess offsetting advantages. For example, on average they may be associated with higher innovativeness and greater adaptability than traditional hierarchical forms (Ravasi and Verona 2000). Thus, benefits may differ across the two forms. A full analysis of the choice of organizational form must take such benefits into account. Second, the problem of sustaining commitments and implicit contracts to not exercise authority for bad reasons directs attention to the ways in which management can actively influence the values and beliefs of employees through strong dissemination of information, the building of corporate value bases, recruitment of employees with preferences similar to management, etc. We hypothesize that there will be more of these kind of managerial activities in internal hybrids than in traditional hierarchical forms.

Conclusions

Firms make use of authority and they delegate discretion. They make use of authority because authority is often a low cost means of handling spillover effects that arise when employees' actions are interdependent. They delegate discretion for a number of reasons, among them because they wish to better utilize expert knowledge, stimulate intrinsic motivation and entrepreneurship, etc. However, the main point in this paper is that the use of authority may conflict with the delegation of discretion. The problem arises because "contracts" to delegate discretion are not enforceable in a court of law. Credible delegation may therefore be hard to sustain. However, we have pointed to and analyzed how various mechanisms help to enforce the implicit contracts that may make delegation credible, how these mechanisms differ across organizational forms, and how they, therefore, influence governance choice.

This has allowed us to contribute to a number of literatures. Thus, we have provided a more extensive treatment than is usual in organizational economics of commitment problems and their organizational ramifications. Although space considerations have ruled out an extensive treatment of this, our analysis also contributes to understanding the *rationales* of particular organizational mechanisms in terms of their contribution to enforcing implicit contracts and commitments. We contribute to the literature on delegation (including parts of the literature on empowerment) by stressing the interaction between authority and discretion in firms. We establish connections to the literature on psychological contracts in organizations. Finally, we contribute to the literature on new organizational forms by concentrating on the organizational costs of such forms, and by arguing that these are likely to be more heavily burdened by the problem of harmful managerial exercise of authority.

With respect to managerial implications, our discussion supports the view that the managerial role should be more concentrated on influencing employees' beliefs and values than on directly meddling with employees' affairs. Also, the managerial role is to a large extent influenced by organizational form. For example, flat organizations that are characterized by strong interdependencies between decisions are particularly prone to commitment problems, and in such organizations, managerial reputations for being consistently fair may be particularly important.

Future research on these issues may proceed along the following lines. First, existing empirical evidence as well as relevant theoretical insights should be compared to the framework developed here in order to gauge the limitations of, challenge, and, ultimately, refine the framework. For example, there is much to learn from existing work on psychological contracts in organizations with respect to understanding why certain managerial actions are perceived as reneging on implicit contracts (while others aren't) and why such behavior harms employee motivation. Second, empirical work informed by the present framework should be carried out. In particular, Table 1 represents a set of, in principle, empirically testable hypotheses. Third, theoretical work may concentrate on extending the framework beyond the comparison of traditional hierarchies and internal hybrids to also include other organizational forms. We are confident that future work along these lines will prove fruitful.

References

Aghion, Philippe and Jean Tirole. 1997. "Formal and Real Authority in Organization," *Journal of Political Economy* 105: 1-29.

Aoki, Masahiko. 1984. *The Cooperative Game Theory of the Firm*. Cambridge: Cambridge University Press.

Argyris, Nicholas and Vai-Lam Mui. 1999. "A Political-Economic Approach to Organizational Dissent," *Working Paper.*

Argyris, Nicholas and Julia Porter Liebeskind. 1999. "Contractual Commitments, Bargaining Power, and Governance Inseparability: Incorporating History into Transaction Cost Theory," *Academy of Management Review* 24: 49-63.

Armstrong, Mark. 1994. "Delegation and Discretion". *Discussion Paper in Economics and Econometrics*, Department of Economics, University of Southampton.

Baker, George, Robert Gibbons, and Kevin J. Murphy. 1999. "Informal Authority in Organizations," *Journal of Law, Economics and Organization* 15: 56-73.

Baker, George, Robert Gibbons, and Kevin J. Murphy. 2001. “Relational Contracts and the Theory of the Firm,” forthcoming in *Quarterly Journal of Economics.*

Barzel, Yoram. 1997. *Economic Analysis of Property Rights*. 2nd ed. Cambridge: Cambridge University Press.

Bazerman, Max H. 1994. *Judgment in Managerial Decision Making*. New York: Wiley.

Bendor, Johanathan. 1985. *Parallel Systems: Redundancy in Government*. Berkeley and Los Angeles: University of California Press.

Brockner, J., T.R. Tyler, Cooper, and R. Shneider. 1992, ”The Influence of Prior Commitment to an Institution on Reactions to Perceived Infairness: The Higher They Are, the Harder They Fall,” *Administrative Science Quarterly* 37: 241-61

Casson, Mark. 1994. “Why are Firms Hierarchical?,” *International Journal of the Economics of Business* 1: 47-76.

Child, John and Rita McGrath. 2001. “Organizations Unfettered: Organizational Form in an Information Intensive Economy,” *Academy of Management Journal* 44: 1135-1148.

Coase, Ronald H. 1937. “The Nature of the Firm,” in Nicolai J. Foss, ed. 1999. *The Theory of the Firm: Critical Perspectives in Business and Management, Vol II*. London: Routledge.

Conger, J. and R. Kanungo. 1988. “The Empowerment Process: Integrating Theory and Practice,” *Academy of Management Review* 13: 471-482.

Crozier, Michel. 1964. *The Bureaucratic Phenomenon*. Chicago: University of Chicago Press.

Daft, Richard L. and Lewin, Arie. 1993. “Where Are the Theories for the ‘New’ Organizational Forms? An Editorial Essay,” *Organization Science* 4: i-iv.

Demski, Joel, Tracy R. Lewis, Dennis Yao, and Hüseyin Yildirim. 1999. “Practices for Managing Information Flows Within Organizations,” *Journal of Law, Economics and Organization* 15: 107-131.

Dow, Gregory K. 1987. “The Function of Authority in Transaction Cost Economics,” *Journal of Economic Behavior and Organization* 8: 13-38.

Fama, Eugene and Michael C. Jensen 1983. ”Separation of Ownership and Control,” *Journal of Law and Economics* 26: 301-325.

Foss, Kirsten. 2001. “Organizing Technological Interdependencies: A Coordination Perspective on the Firm,” *Industrial and Corporate Change* 10: 151-178.

Foss, Nicolai J. 2001. “Selective Intervention and Internal Hybrids: Interpreting and Learning from the Rise and Decline of the Oticon Spaghetti Organization,” forthcoming, *Organization Science*.

Foss, Nicolai J. 2002. “Coase versus Hayek: Authority and Firm Boundaries in the Knowledge Economy,” *International Journal of the Economics of Business* 9: 9-36.

Galbraith, Jay R. 1974. “Organization Design: An Information Processing View,” *Interfaces* 4: 28-36.

Gal-Or, Esther and Raphael Amit. 1998. “Does Empowerment Lead to Higher Quality and Profitability?,” *Journal of Economic Behavior and Organization* 36: 411-431.

Grandori, Anna. 2001. *Organizations and Economic Behavior*. London: Routledge.

Halberstam, David. 1986. *The Reckoning*. New York: Avon Books.

Hart, Oliver. 1995. *Firms, Contracts, and Financial Structure.* Oxford: Oxford University Press.

Heath, Chip, Marc Knez, and Colin Camerer. 1993. “The Strategic Management of the Entitlement Process in the Employment Relationship,” *Strategic Management Journal* 14: 75-93.

Hendry, John. 2002. “The Principal’s Other Problem: Honest Incompetence and the Specification of Objectives,” *Academy of Management Review* 27: 98-113.

Holmström, Bengt. 1999. “The Firm as a Subeconomy,” *Journal of Law, Economics, and Organization* 15: 74-102

Holmström, Bengt and Paul Milgrom. 1991. “Multitask Principal-Agent Analysis: Incentive Contracts, Asset Ownership and Job Design,” *Journal of Law, Economics and Organization* 7: 24-54.

Jensen, Michael C. and William H. Meckling. 1992. “Specific and General Knowledge and Organizational Structure,” in Lars Werin og Hans Wijkander, eds. 1992. *Contract Economics*. Oxford: Blackwell.

Jensen, Michael C. and Karen Wruck. 1994. ”Science, Specific Knowledge and Total Quality Management,” in Michael C. Jensen. 1998. *Foundations of Organizational Strategy*. Cambridge: Harvard University Press.

Klein, Benjamin. 1991. “Organizational Capital and the Theory of the Firm,” in Oliver E. Williamson and Sidney G. Winter, eds. 1991. *The Nature of the Firm*. Oxford: Basil Blackwell.

Klein, Benjamin and Keith Leffler. 1981. “The Role of Market Forces in Assuring Contractual Performance,” *Journal of Political Economy* 89: 615-641.

Kiser, Edgar and Yoram Barzel. 1991. “The Origins of Democracy in England,” *Rationality and Society* 3: 396-422.

Kreps, David M. 1990. “Corporate Culture and Economic Theory,” in James G. Alt and Kenneth Shepsle, eds. *Perspectives on Positive Political Economy*. Cambridge: Cambridge University Press.

Melumad, Nahum D., Dilip Mookherjee and Stefan Reichelstein. 1995. “Hierarchical Decentralization of Incentive Contracts,” *RAND Journal of Economcis* 26: 654-672.

Miles, Raymond E., Charles C. Snow, John A. Mathews, Grant Miles and Henry J. Coleman, Jr. 1997. “Organizing in the Knowledge Age: Anticipating the Cellular Form,” *Academy of Management Executive* 11: 7-20.

Milgrom, Paul and John Roberts. 1992. *Economics, Organization, and Management*. Prentice-Hall.

Miller, Gary. 1992. *Managerial Dilemmas*. Cambridge: Cambridge University Press.

Moe, Timothy. 1997. “A Positive Theory of Public Bureacracy,” in Dennis Mueller, ed. 1997. *Perspectives in Public Choice: A Handbook.* New York: Cambridge University Press.

Morsing, Mette and Kristian Eiberg, eds. 1998. *Managing the Unmanageable For a Decade.* Hellerup: Oticon.

Osterloh, Margit and Bruno Frey. 2000. “Motivation, Knowledge Transfer and Organizational Form,” *Organization Science* 11: 538–550.

Penrose, Edith T. 1959. *The Theory of the Growth of the Firm*. Oxford: Oxford University Press.

Peters, Tom. 1992. *Liberation Management*. New York: Alfred A. Knopf.

Rajan, Raghuram G, and Luigi Zingales 1998. “Power in a Theory of the Firm,” *Quarterly Journal of Economics* : 387-432.

Ravasi, Davide and Gianmario Verona. 2000. “Organizing the Process of Knowledge Integration: The Benefits of Structural Ambiguity,” forthcoming in *Scandinavian Journal of Management.*

Richardson, Hettie A., Robert J. Vandenberg, Terry C. Blum, and Paul M. Roman. 2002. “Does Decentralization Make a Difference for the Organization?,” *Journal of Management* 8: 217-244.

Robinson, Sandra L. and Denise M. Rousseau. 1994. ”Violating the Psychological Contract: Not the Exception but the Norm,” *Journal of Organizational Behavior* 15: 245-259.

Robinson, Sandra L. and Elizabeth Wolfe Morrison. 1995. ”Psychological Contracts and OCB: The Effects of Unfulfilled Obligations on Civic Virtue Behavior,” *Journal of Organizational Behavior* 16: 289-298.

Rousseau, Denise M. 1989. “Psychological and Implied Contracts in Organizations,” *Employee Responsibilities and Rights Journal* 8: 121-139.

Sah, Raaj and Joseph E. Stiglitz. 1985. “Human Fallibility and Economic Organization,” *American Economic Review* 75 (Papers and Proceedings): 292-297.

Simon, Herbert A. 1951. “A Formal Theory of the Employment Relationship,” in idem. 1982. *Models of Bounded Rationality*. Cambridge: MIT Press.

Simon, Herbert A. 1962. “The Architecture of Complexity,” in Oliver E. Williamson and Scott Masten, eds. 1995. *Transaction Cost Economics*. Aldershot: Edward Elgar.

Simon, Herbert A. 1991. “Organizations and Markets,” *Journal of Economic Perspectives* 5: 25-44.

Thomas, K. and B. Velthouse. 1990. “Cognitive Elements of Empowerment: An Interpretive Model and Intrinsic Task Motivation,” *Academy of Management Review* 15: 666-681.

Thompson, James D. 1956. “Authority and Power in “Identical” Organizations.” *American Journal of Sociology* 62: 290-301.

Thompson, James D. 1967. *Organizations in Action*. New York: McGraw-Hill.

Vancil, Robert and Lee E. Buddrus. 1979. *Decentralization: Managerial Ambiguity by Design*. Homewood, Il.: Irwin.

Vroom, V. H. and Jago, A. G. 1988. *The New Leadership: Managing Participation in Organizations*. Englewood Cliffs, NJ: Prentice Hall.

Weber, Max. 1947. *The Theory of Economic and Social Organization*. Translated by A. M. Henderson and Talcott Parson; Edited by Talcott parson. New York: Oxford University Press.

Williamson, Oliver E. 1996. *The Mechanisms of Governance*. Oxford: Oxford University Press.

Zenger, Todd. 2002. “Crafting Internal Hybrids,” *International Journal of the Economics of Business* 9: 79-96.

Zenger, Todd and William S. Hesterly. 1997. "The Disaggregation of Corporations: Selective Intervention, High-Powered Incentives, and Molecular Units," *Organization Science* 8: 209-222.

Figure 1: *Surplus as a function of discretion*

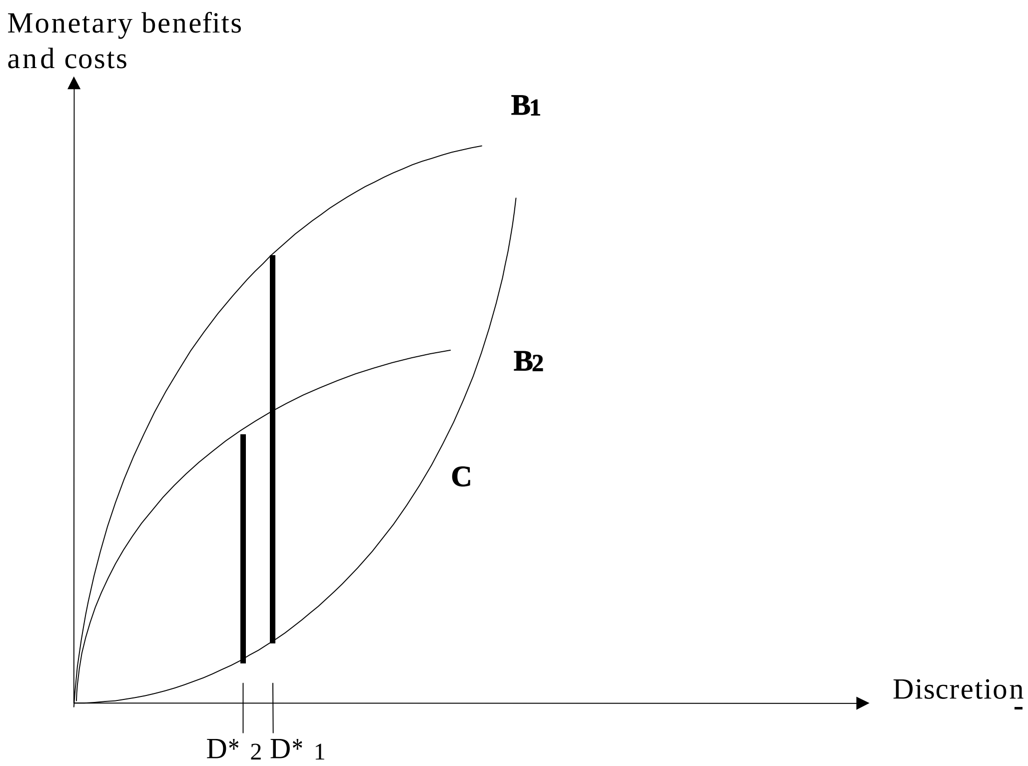

Figure 2: *Determinants of Degree of Delegation*

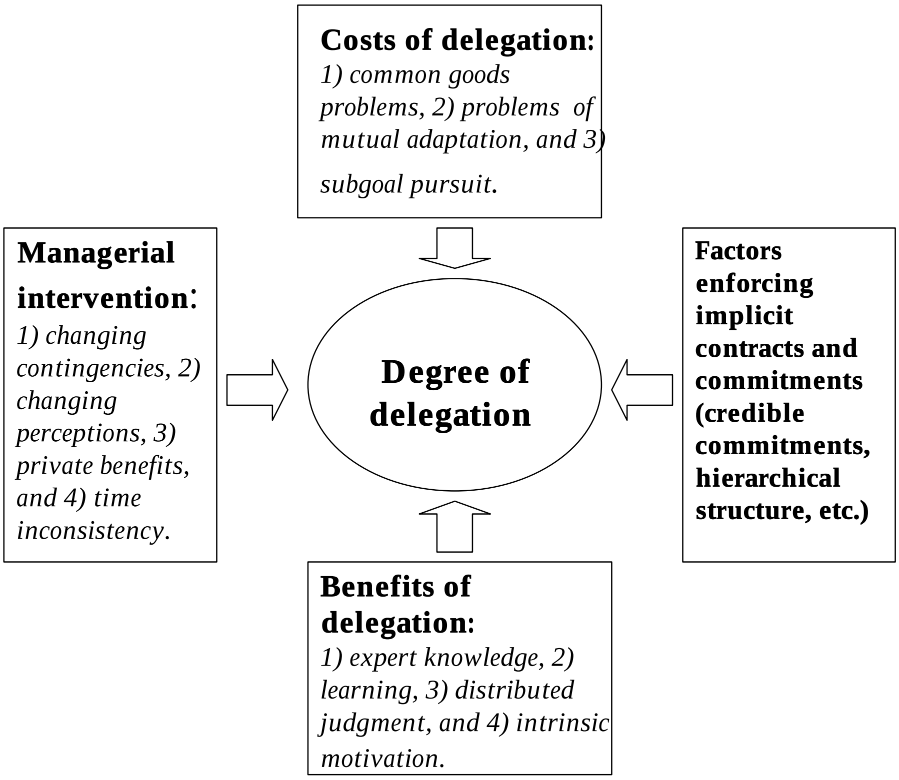

Table 1: *Organizational Form and Credible Commitment*

		Organizational Forms	
		Traditional Hierarchy	***Internal Hybrid***
Factors that enforce promises and implicit contracts	***Credible commitments, e.g. managers staking personal reputations***	++	+
	Differing preferences in the managerial hierarchy	++	0
	Informational structure (distance and overload)	++	0/+
	Employees control critical resources	0/+	++
	Reward systems	0/+	++
	Trade unions and professional bassociations	++	+
	Competitive forces	Strongly context dependent	Strongly context dependent