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In the early days of 1914, Henry Ford made a major decision about the allocation of resources at Ford Company. At a board meeting, he proposed raising the daily wage for his employees significantly above the going market rate of approximately $2.20. Members of the board, amazed at the proposal, responded ironically that if he was going to raise the daily wage to $3, he might as well raise it to $4 or even $5. Ford accepted the challenge and made a place for himself in history by announcing the $5 day. Approximately half of the company’s anticipated profits, a sum equal to $10 million, were set aside for the new plan, which went into effect on January 12 of that year (Meyer 1981).

What do the social sciences have to say about Ford’s decision to impose a $5 day? In what terms is this historical fact to be analyzed? Was it a simple, profit-maximizing act on Ford’s part? Or was it fundamentally a political act?

TWO LITERATURES ON HIERARCHY

Since the inception of organization theory, there have been two rather distinct literatures on the topic of organizational control. One views organizational control as a mechanistic problem of designing incentive systems and sanctions so that self-interested and intrinsically unmotivated employees will find it in their own interest to work toward the organization’s goals. In other words, management is seen as shaping subordinate behavior through the correct system of rewards and punishments. This literature is associated with, for example, Frederick Taylor, the father of scientific management, who was a devout advocate of incentive wage systems as a way of motivating subordinates.
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More recently, economics has contributed to this literature the “principal–agency theory,” which falls almost entirely within this mechanistic approach. According to this theory, agents are perceived as having distinct tastes (such as the desire to limit risk taking or costly effort), which they pursue as rational maximizing individuals. The principal’s job is to anticipate the rational responses of agents and to design a set of incentives such that the agents find it in their own interests (given the incentive system) to take the best possible set of actions (from the principal’s perspective).

“Leadership” has a negligible role in this approach, since the manager’s goal is essentially the engineering of the organizational “machine.” If a manager has engineered the correct system of incentives, then she does not have to “lead” or “inspire” subordinates to do the right thing; they will find right actions to be in their own interest. Competitive forces in the market for managerial talent and for capital automatically tend to discipline the self-interested behavior of the actors involved, with the benign result that “agency costs” are kept to an efficient minimum (Jensen and Meckling 1976; Fama 1980).

This entire literature contrasts sharply with the second, more organic view of organizations, which is centered primarily in political science and organizational psychology. From this perspective, resource allocation results from the decisions of individual leaders. The literature regards the manager’s primary job to be one of leadership— that is, inspiring a willingness to cooperate, to take risks, to innovate, to go beyond the level of effort that a narrow, self-interested analysis of the incentives would summon.

An early example of this approach is Chester Barnard’s Functions of the Executive (1938). Barnard regards organizations as fundamentally cooperative groups of individuals, and the executive’s chief job is not so much to shape the self-interested behavior of subordinates as to inspire them to transcend self-interest. Other executive abilities, he claims, will not be put forth, will not even be developed, without that sense of responsibility which makes the sacrifices involved a matter of course, and which elicits the initial faith in cooperation. . . . Organizations endure, however, in proportion to the breadth of the morality by which they are governed. This is only to say that foresight, long purposes, high ideals, are the basis for the persistence of cooperation. (282)

Effective leadership is by no means automatic from this perspective. While competitive market forces may tend to reward the more efficient leaders, other leaders may be able to insulate themselves from the disciplining force of the market by political stratagems that result in governmentally enforced entry barriers or restrictions in the capital market. The result may well be persistent inefficiencies within the hierarchy (Perrow 1987).

The contrast is clear. Economists assume that subordinates respond to incentive systems in a self-interested maximizing way. Barnard urges managers to inspire subordinate “sacrifice” by the “breadth of the morality” that
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they exemplify. Economists regard Barnard’s urgings as futile; political scientists and behaviorists feel that organizational economics is based on a chokingly narrow view of the possibilities of leadership and is politically naive.

The primary purpose of this book is to explore the literature of political economy as the theoretical bridge between the two literatures on hierarchical organizations. The first two-thirds of the book argues that a narrow, neoclassical version of organizational economics self-destructs. While the economic rationale for the existence of hierarchy is based on its capacity to correct market failure, the internal logic of self-interested behavior by both subordinates and superiors cannot be shown to sustain a vision of hierarchy as a smoothly running, efficient machine. On the contrary, results described in the literature of social choice theory, principal–agency theory, and incentive compatibility reveal built-in logical inconsistencies that make it impossible to design an incentive/control system that simultaneously disciplines the self-interested behavior of both superiors and subordinates. For every incentive system that has other desirable characteristics, there will always be an incentive for some individuals to “shirk” – to pursue a narrower definition of interest that results in equilibrium outcomes that everyone in the organization can recognize as deficient.

This being the case, I submit that those organizations whose managers can inspire members to transcend short-term self-interest will always have a competitive advantage. The final third of this book argues that modern game theory provides a theoretical structure for a more rigorous analysis of cooperation and political leadership in hierarchies. As such, it has a clear methodological link to organizational economics; however, the game-theoretic analysis legitimizes many of the substantive concerns of the more organic literature of organizational psychology and politics. In the context of the analysis of repeated games, the traditional organic concepts of cooperation, culture, trust, commitment, and leadership take on new and vivid meanings.

COASE ON HIERARCHY

While this book attempts to bridge organizational economics and organizational behavior, the starting point for the analysis lies squarely in organizational economics. This discipline began, slowly and hesitantly, with the work of economist Ronald Coase in 1937. Coase assumed “that the distinguishing mark of the firm is the supersession of the price mechanism” (389). Within the firm, coordination is achieved not directly by price, but by the work of the entrepreneur “without the intervention of the price mechanism” (388):

The main reason why it is profitable to establish a firm would seem to be that there is a cost of using the price mechanism. The most obvious cost of “organising”
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production through the price mechanism is that of discovering what the relevant prices may be. (388)

Discovering prices, and “negotiating and concluding a separate contract for each exchange transaction which takes place,” can be prohibitively expensive. It is the size of the transaction costs that makes it worthwhile for an entrepreneur to direct activities within a broad grant of discretionary authority:

For this series of contracts is substituted one. . . . The contract is one whereby the factor, for a certain remuneration (which may be fixed or fluctuating), agrees to obey the directions of an entrepreneur within certain limits. The essence of the contract is that it should only state the limits to the powers of the entrepreneur. Within these limits, he can therefore direct the other factors of production. (391; emphasis in the original)

According to Coase the “master—servant” relationship could be defined by the ability of the employer to “direct” the actions of the employee within certain broad bounds. Coase claimed that the existence of the firm depended on the advantages of replacing voluntaristic market transactions with hierarchical direction. From this perspective, Henry Ford’s decision to impose a $5 daily wage was a significant step away from coordination by the price mechanism and toward the creation of hierarchical authority. It was an example not of profit-maximizing behavior within the market, but of a successful attempt to “supersede” the price mechanism by direct hierarchical coordination.

Institutions Matter: Coase and the Subsequent Development of Organizational Economics

Coase has been a central figure in the subsequent development of the economics of the firm, stating as he did the clear premise that institutions influence the nature of transactions. Transaction costs have emerged as a concept that is fundamental to our understanding of industrial organization.

Many of the lessons of Coase’s analysis, however, have been resisted by organizational economists. Many have assumed that virtually all of the lessons learned from market economics can be easily transferred to transactions in the hierarchy. In particular, some organizational economists have continued to insist on the market-like nature of internal firm contracts and on the efficacy of the price mechanism, often as a justification for continued use of the heroic assumptions of the neoclassical model.

For instance, unlike Coase, Alchian and Demsetz (1972) insist that hierarchical firms like Ford Motor Company do not partake of political authority:

It is common to see the firm characterized by the power to settle issues by fiat, by authority, or by disciplinary action superior to that available in the conventional market. This is delusion. The firm does not own all its inputs. It has no power of
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fiat, no authority, no disciplinary action any different in the slightest degree from ordinary market contracting between any two people. I can “punish” you only by withholding future business or by seeking redress in the courts for any failure to honor our exchange agreement. That is exactly all that any employer can do. (777)

Alchian and Demsetz clearly differ with Coase about the distinct nature of the master–servant contract, which Coase regards as the distinguishing characteristic of the firm. Unlike Coase, they see a fundamental continuity between contracts in the market and those in the firm.

Jensen and Meckling (1976) agree with Alchian and Demsetz that the relations between the firm and the employee are contractual and thus exorcised of politics:

Contractual relations are the essence of the firm, not only with employees but with suppliers, customers, creditors, etc. . . . The private corporation or firm is simply one form of legal fiction which serves as a nexus for contracting relationships and which is also characterized by the existence of divisible residual claims on the assets and cash flows of the organization which can generally be sold without permission of the other contracting individuals. (310–11)

The focus on firms as a nexus of voluntary contracts allows the power of market economics to be applied to these contracts. Competitive market forces in a nearly perfect capital market and other markets drive those relations involving the firm to efficient contractual forms. As Fama (1980) claims, “The firm is disciplined by competition from other firms, which forces the evolution of devices for efficiently monitoring the performance of the entire team and of its individual members” (288–9). For these economists, unlike Coase, the fundamental coordination mechanism within the firm, as well as among firms, is the price mechanism, not hierarchical direction. Furthermore, they assume that the price mechanism is capable of disciplining efficient outcomes inside the hierarchical firm.

Williamson and Ouchi (1981) have explicitly recognized the inevitability of efficient contracts as a fundamental principle of what they call the “efficiency hypothesis”:

Except when there are perversities associated with the funding process, or when strategically situated members of an organization are unable to participate in the prospective gains, unrealized efficiency opportunities always offer an incentive to organize. (355)

Thus, if there is a different, more efficient way of organizing a production process, there is always a reason to find a contract that will result in that more efficient process. In much of organizational economics, the persistent theme is the hierarchy as a nexus of voluntary contracts, permeable to competitive market pressures and responding swiftly and smoothly with efficient organizational forms and procedures to changes in those market pressures.
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The elegance of organizational economics, the fact that it is based on the same parsimonious set of initial assumptions that have served so well in the microeconomic analysis of markets, and the force of the logical arguments based on those assumptions have combined to give the nascent field an impact far beyond that implied by the number of those who have been working in it. Even behaviorists have recognized that organizational economics has been the source of new theoretical insights in an area that was sorely in need of them.

THE ANOMALIES OF ORGANIZATIONAL ECONOMICS

The precision and rigor of organizational economics have led to a number of rather specific predictions. As might be expected with such a young science, these predictions unfortunately turn out to be false. The existence of these anomalies prompts a reorientation of organizational economics around the notion of political authority, which is attempted in this book.

For instance, in a recent article in the Journal of Finance, Baker, Jensen, and Murphy (1988) present economics with a puzzle. As they point out, economic theory assumes that there are competitive market pressures driving firms to their most efficient contractual forms. Yet the incentive systems being used in firms are not those that economic theory would regard as most efficient. Many firms have followed Henry Ford’s example by paying more than the market wage, by paying a flat daily wage not directly linked to individual performance, and by not discriminating among employee types. Typical incentive systems are less likely to link pay with performance, and more likely to be egalitarian, than current economic theory would predict.

Baker, Jensen, and Murphy (1988) explore the possibility that typical firms use inefficient incentive systems as a result of managerial shirking—“managers have few incentives to structure and enforce value-maximizing contracts with subordinates” (614). According to this possibility, Henry Ford was simply making his own job easier when he raised the daily wage to $5, a caprice that has since been followed by countless other undisciplined managers. The problem with this hypothesis is that it does not “explain why competitive forces in the product, labor, and control markets are not sufficient to induce economically efficient compensation policies” (615).

If, however, competitive market forces do require economically efficient compensation policies, then economic theory is deficient in being unable to explain why those incentive systems consistently chosen by firms are efficient. “Ultimately, it may be that psychologists, behaviorists, human resource consultants, and personnel executives understand something about human behavior and motivation that is not yet captured in our economic models” (615).
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Either way, current economic theory of the firm is deficient. Either competitive market pressures are less likely to discipline hierarchies than economists have imagined, or else there are reasons outside of current economic theory that egalitarian incentive systems are more efficient than those typically prescribed by economists.

Stiglitz (1987) describes inconsistencies between typical labor contracts and those predicted by the economic theory of efficiency. Because employees are risk averse, it is agreed that efficient contracts would insure employees against the risk that is associated with an uncontrollable economic cycle; training costs should be borne by the firm; flat wages would allow firms to retain workers of a given quality at a lower wage. “None of these predictions conform to what is actually observed” (50).

The same puzzle has been noted by other economists (Akerlof and Yellen 1986; Liebenstein 1987). Market forces should promote efficiency, yet we observe incentive systems in hierarchies that economists tell us should not be efficient. Can it be that hierarchies persist in the use of inefficient incentive systems? Yet the very rationale for the existence of hierarchy in a market economy is efficiency: When markets cannot be perfectly efficient due to information asymmetries or other problems, competitive pressure must reward those firms that organize themselves as hierarchies.

An even greater anomaly underlies the entire U.S. labor market. Virtually every market in the United States clears. If there is a line of extra buyers or sellers, the price is forced up or down until demand and supply equilibrate. The exception is the labor market. There are and have been a large number of providers of labor who are involuntarily unemployed — in effect they are queued up to give their labor. Yet the wage is not decreased in order to increase demand and decrease supply, as normal neoclassical economics would predict. There is an extensive literature devoted to this one anomaly. As is shown in Chapter 3, whatever the causes of the anomaly, its implications for hierarchical authority in the firm are enormous.

“Stickiness” in labor markets is obvious, and there are numerous possible sources; but capital markets are generally assumed to be among the most fluid and frictionless in the country. Yet even here, there are anomalies that directly concern the firm and its hierarchy. Competition in the capital markets should force managers to act as if they had the same preferences as stockholders. But in fact, empirical investigation of standstill agreements, greenmail, and poison pills suggests that the capital market is not allowed to be as perfect a disciplining device as economic theory would predict. As a result, managers may have more room for discretion, and discretionary authority, than would otherwise be the case.

It could be that these empirical anomalies in organizational economics are the result of flawed data gathering, data analysis, or interpretation. Yet the most precise, controlled laboratory experiments, conducted in
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settings designed to test rigorously the logical implications of some aspect of organizational economics, have themselves demonstrated anomalies. Bull, Scotter, and Weigelt tested one implication of principal–agency theory, which is that in the presence of uncertainty, a rank-order tournament incentive system should work better than a piece-rate system. The results were striking. In a piece-rate system, subjects converged to equilibrium effort levels rather quickly. In tournament experiments, in contrast, the economic model performed relatively poorly. There was little convergence over a long period of time. Furthermore, in tournaments in which subjects were either disadvantaged or advantaged, disadvantaged subjects exerted a great deal more effort than economic theories predicted. Participants in these situations seem to engage strategically with one another in ways that are not completely understandable; “as a practical matter, it appears that a cost to choosing a tournament system over a piece rate system is that the principal must bear uncertainty as to how the agents will react to the tournament” (Bull, Schotter, and Weigelt 1987: 29).

Another group of laboratory experiments was performed to test a basic premise of organizational economics, which is that individuals facing the task of producing shared public goods by means of collective action will be totally stymied by the free-rider problem. The experiments revealed much higher levels of contribution in small-group collective action experiments than should be observed (Marwell and Ames 1979).

All of these empirical results are anomalies from a perspective which assumes that, regardless of institutional context, maximizing behavior and efficient outcomes follow immediately and automatically in the firm. In experiments as well as in the field, however, the strategic behavior of individuals in situations involving extreme interdependence is beyond the ability of current neoclassical economic theories to explain. It is in these situations that institutions matter most, because institutions provide cues to individuals about how others are likely to behave in these complex settings; thus, it is imperative to try to understand how institutions shape and condition the behavior of interdependent individual choice (North 1988).

Institutions Matter: Markets versus Hierarchies

Like Coase’s 1937 article, and unlike much of the subsequent work in organizational economics, this book assumes that coordination within the firm takes place by hierarchical direction rather than by the use of the price mechanism. And as argued by the foremost developers of Coase’s theories, the institutional switch from market to hierarchy makes an enormous difference in the behavior of individuals; institutions matter (Williamson 1975; North 1990b).
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Institutions and information

As students of institutions have emphasized (North 1990b), institutions simultaneously determine the rules of the game and condition the choices of individuals under the rules. For instance, different institutions can shape the flow of information among individuals. A competitive market, it appears, is an outstanding mechanism for conveying information and disciplining individual behavior. Consequently, individuals in the market institution very quickly learn to act “as if” they were the perfectly informed maximizing agents of neoclassical economic theory (Plott 1986: 301–28).

However, in other institutions – such as hierarchies – information is a scarce commodity, requirements for cognitive skills may be great, and individual behavior may deviate markedly from that assumed by the neoclassical model (Hogarth and Reder 1986; Simon 1986; Tversky and Kahneman 1986). Individuals may even be rewarded for strategic misrepresentation of private information (Halperin 1974). In such a setting of information scarcity, shared beliefs about how the world works – ideology – may play an especially important role (North 1990b). Henry Ford’s decision to impose a $5 daily wage was in large part a result of his own ideologically driven conceptions about how employees would respond to a wage that was more than twice the market wage and to the queuing for Ford jobs that would result from this wage.

Institutions and motivation

Even the kinds of incentives designed to motivate individuals may differ across institutions. In competitive markets, individuals are assumed to be relatively anonymous price takers, and there is little opportunity for side-payments based on multidimensional networks of social relationships; the automobile buyer has little to offer for a particular auto besides an amount of cash that is very close to the market price for that brand and year. In the hierarchically coordinated transactions within the firm, employer and employee may spend years in close personalized exchange; the side-payments available (to both parties!) in their attempts to influence other members of the hierarchy may include social acceptance, personal services, or other motivating factors besides cash.

As North (1988) notes, “Human motivation is simply more complicated than simple wealth maximization. Human beings do trade off wealth or income for other values, and because the price one pays for one’s convictions are frequently lowered by institutions, institutions are important to choices” (2). Hierarchies, unlike markets, institutionalize long-term mutual commitments that make it easy to trade off social acceptance and esteem against wealth. As I argue in Part III of this book, this may well make
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possible a level of cooperative effort that is the most convincing advantage that hierarchy has over the market.

Institutions and property rights

As Coase argued in 1960, in the presence of transaction costs, resource allocations are altered by property rights structures. The hierarchical firm clearly develops rules (formal and informal) for defining property rights that determine resource allocations within the firm. Slaveowners sometimes found it advantageous to grant slaves a partial property right to their labor so that they would be motivated to work to earn their freedom (Barzel 1989); similarly, the owner of a firm may choose to “share” ownership in the firm for motivational purposes. The “constitution,” or institutional rules and norms by which property rights are defined within a hierarchical firm, becomes a central political issue within the firm, providing one more distinction between the market and hierarchy. As I will discuss in Chapter 2, Ford’s decision to enact a $5 day can be seen as a political act redefining property rights within the firm.

Institutions and efficiency

Given that institutions condition the availability of information, shape incentives, and define property rights, are efficient outcomes inevitable? As Coase pointed out, directors of hierarchical firms attempt to coordinate internal resource allocation without the benefit of the price mechanism. This initiates a process of political decision making that may enhance the goals of the emergent political figures in the firm, but there is no guarantee that the results will necessarily be efficient. North (1988) argues:

While political institutions facilitate exchange amongst bargaining parties, there is no implication of economic efficiency as an outcome. Efficient political exchange can, given the interests of the parties, create or alter economic institutions that may raise or lower the costs of economic exchange. (14)

North has pointed out an important reason that political institutions may produce allocations of property rights that do not result in economic efficiency. A ruler may prefer a system of property rights that guarantees him more net tax revenue over one that encourages economic growth for society as a whole. This claim is isomorphic to a result described in Chapter 8 regarding conflict between profit maximization and efficiency in the firm.

For the firm, unlike the medieval state, external market forces may be a means by which internal political inefficiencies are disciplined. At the same time, firms develop and use their external political power to insulate themselves from market discipline — witness the business lobbying for successful