1 / Introduction: Citizens, Consumers, and Workers

The right of adults to select their representatives in the political process is widely regarded as a fundamental aspect of American democracy. The system is imperfect: some individuals choose not to exercise that right. Others seek to amplify the influence of their vote by engaging in a variety of political activities. Nevertheless, the belief is widely shared that the political system ought to be broadly responsive to the wishes of the electorate, which, in turn, ought to comprise most of the adult population. Through the ballot box, adult Americans have the opportunity to shape their political environment and to make choices regarding public goods such as defense expenditures, the environment, and the legal system.[1]

By contrast, in the consumption of private goods, Americans express their preferences not through a principle of one person, one vote, but through a system in which each individual's "votes" for different goods are proportional to that individual's expenditures. Those who spend a lot have a stronger effect on the production of consumer goods than those who spend little. Inequalities in expenditures correspond to inequalities in the distribution of influence over the production of private consumer goods.

Consider now Americans as workers. In this dimension of their lives, American workers may shop around to locate the most at-

tractive employment opportunity, but once this has been determined most workers have little say over their work environment. The situation resembles the role of the American as consumer in that a worker who is dissatisfied with his or her work environment is expected to seek employment elsewhere, much as a consumer who is dissatisfied with a commodity or store might change his or her purchasing behavior. It is a take-it-or-leave-it approach to transactions. But is the worker's situation comparable with that of the consumer?

HOW LABOR MARKETS DIFFER FROM CONSUMER MARKETS

For a number of reasons, the exchange of labor is quite different from the exchanges that individuals engage in as consumers, and therefore the take-it-or-leave-it approach to labor markets is unsatisfactory as model of how workplace transactions ought to be conducted. First, unlike transactions involving consumer goods and services, exchanges involving labor services cannot be disembodied from the individuals supplying them. The sellers of labor services must deliver these services themselves. This means that workers care not only about how much they are paid but also about many nonmonetary aspects of their jobs: Who will they work with? How hard are they expected to work? What things may they refuse to do? Who will be their supervisors? The answers to these questions profoundly affect the value of the job to a worker.

Second, the labor market is distinguished from the consumer market by the different dimensions to the exchange of labor services. Workers supply not only their time but also their effort, their cooperation, and a subset of their liberties to management. The typical supervisor has the authority to direct a worker to a number of different tasks, activities that are almost never specified in advance. In most cases, the specification of the labor contract—precisely what duties the worker is supposed to undertake, with what diligence, and for what duration—is difficult to outline. Hence it is left vague and is incomplete. Even if a written statement were drawn up that listed the work to be done in various circumstances, it would leave lots of opportunity for disputing whether the contract had been adhered to. By its very character, the ex-

change of labor services precludes uncomplicated contracts under which a well-defined payment is specified for a well-defined job.

Third, long-term relationships are apt to develop between a worker and an employer. Because a worker finds a job with a particular employer difficult to assess until actually doing the job, and because an employer finds the quality of a worker difficult to determine before the job is performed, workers and employers sample one another. Tacitly, they contract for a period of time in which to determine the value of the match. It is not surprising that turnover is highest among workers who have been employed for only a short while. This is a reflection of the difficulty in assessing the quality of the match before actually experiencing it. When a valuable match has been made, the worker and employer remain with each other, and long-term contracts emerge.

Fourth, among such long-tenure employees, the employer-worker match includes an element of "rent": the worker's wage with this employer is better than his or her best available alternative wage from another employer; at the same time, this worker is paid a wage that is less than the cost to management of employing a replacement worker.[2] In this situation, the employer views a new worker as only an imperfect substitute for an existing worker, and the worker assesses other job possibilities as inferior to his or her current employment. The worker embodies specific skills or attributes that make him or her a more valuable employee to the current employer than to another company. Because the worker's productivity is higher in the current company than it would be in another company, and because the employer cannot replace the worker with a new employee who embodies the same attributes, the relationship between this worker and this employer has an idiosyncratic element. There is something distinctive and nonreproducible about the current match between a worker and an employer.

Thus the terms of the implicit contract are somewhat arbitrary. The employee's compensation has both a lower and an upper bound, and where the pay settles within these bounds is unclear. The lower bound is set by what the worker could get elsewhere: the value of the job to the employee cannot be less than what could be obtained in another company, or else the employee would quit. The upper bound is set by the firm's expected cost of hiring and training a new employee. If the employee's compensa-

tion exceeded this cost, the firm would find it more profitable to replace the employee with a new hire. In some cases, the bounds will be narrow, in which case there will be little latitude in setting the wage. In other cases, the bounds will be wide, and the discretionary element in wage setting will be considerable.

Where the terms of the contract will settle within these bounds will be determined by bargaining between the employer and the worker, although it has often been surmised that, in most instances, the employer has the upper hand in this bargaining setting. This is because in the event of bargaining breaking down and the employment relationship is discontinued, the loss to the employer is relatively small (that is, the cost to an employer of replacing a single worker assumes a small fraction of his total costs), whereas the worker's entire livelihood may be at stake. This greater vulnerability of the worker to the termination of the employment relationship gives the employer an advantage in bargaining. Of course, unless the workers are organized in a labor union, the bargaining is typically tacit, not explicit. However, this does not mean that the relationship is not one of bargaining, only that the bargaining outcome is close to what the employer specifies.

For these reasons, labor markets tend to have characteristics that set them apart from the markets for commodities and for physical and financial assets. These characteristics imply that the take-it-or-leave-it process by which commodities are allocated in markets for private consumer goods may not be well suited to the incomplete contracts that typify labor markets.

WORKPLACE PUBLIC GOODS

In the market for private consumer goods, consumers reveal their preferences by "exiting" (that is, ceasing consuming) the market for commodities they do not care for and by "entering" (that is, embarking on consuming) the market for commodities they prefer. In this way, through spending patterns, consumers' preferences are signaled to firms, inducing firms to tailor their production in response to these exit and entry cues. The exit mechanism of preference revelation operates less effectively in markets in which the costs of switching are high and when information about alternative options is incomplete.[3] Thus, for example, few would advocate dispensing with local elections on the ground that the best

way to register dissatisfaction with the policies followed by the local government is to live elsewhere. Some migration is surely motivated by the search for a more attractive local jurisdictions. However, the opportunity to voice one's preferences for local government policies through elections and speaking out at meetings is, at the very least, a useful complement to voting with one's feet.[4]

The situation within a workplace is somewhat analogous to that of local government in that important public goods components are present in both venues. For example, when a workplace is made safer, the benefit is provided not to a single worker but to all workers in that workplace; usually, one worker's safety cannot be enhanced without also enhancing the safety of the neighboring worker. The public goods parallel is also present when there are important interdependencies among workers: many firms require conformity among workers in the length of the workday and the scheduling of breaks. Such synchronization dictates that the operation of the workplace cannot be tailored to the heterogeneous preferences of individual workers, just as the different elements of an assembly line cannot run at different speeds. A third example of workplace public goods relates to each company's rules and conventions for dealing with employee grievances. Just as the legal system enforces the rights of all citizens when it rules on a particular case, so a grievance system that operates within a firm shapes the rights of all workers in that firm. Although these public goods are not extended to all workers in the economy, they are locally universal to one workplace.

A firm could determine the preferences of its workers for the length of the workday and the pace at which the assembly line operates by trying different schedules and speeds and observing the corresponding rate at which its employees quit the enterprise. Although it might be difficult for the firm to draw inferences from these patterns of turnover, quit rates are likely to provide some useful information. This information about workers' preferences can be augmented by direct communication with the workers.

WORKER PARTICIPATION

If the efficient operation of the firm calls for mechanisms that elicit the "voice" of employees on workplace public goods questions, why don't employers supply these mechanisms voluntarily? In

fact, many employers do set up mechanisms that solicit from workers information about their preferences and their recommendations for improvements in the organization of production. Sometimes these preferences are delivered individually, as when a worker raises an issue with a supervisor or drops a note in a suggestion box. Other mechanisms are collective and take the form of employee involvement committees, assemblies, briefing groups, and labor unions. In this way, many workers in the United States are already involved in fashioning their work environments. However, when workers are asked about the extent of their power to voice their opinions about the workplace, they generally reply that these mechanisms are inadequate.[5] The U.S. economy may be effective in satisfying consumers' demands for private goods, but it appears to be less successful in satisfying employees' demands for a vigorous voice in shaping their work environments. Why is there an underprovision of these voice mechanisms?

First, employers tend to be suspicious that the activities of these voice mechanisms will not be restricted to issues that enhance productivity but will become a means to reallocate the organization's rents away from the firm's owners and toward production labor. After all, the mission of conventional firms is to maximize profits for their owners, not to maximize productivity. Hence employers fear that participatory schemes such as health and safety committees are apt to stray from their task of improving the efficiency of the organization and become embroiled in a struggle over the division of the rents.

A second reason for the inadequacy of voice mechanisms at the workplace derives from the very nature of the public goods they are designed to produce. Because public goods have the character of being nonexclusive—that is, if a public good is provided to one person, it is available to all people—each person has an incentive to conceal his or her true valuation of this good in the hope that others will pay for provision of the public good. In this case, a single worker will "free ride" on other people's willingness to pay. Because all workers tend to conceal their true valuations and are attracted by the possibility of free riding, the result is a chronic underprovision of public goods in the workplace.

Consider a situation in which a number of workers are agitating to press the employer to institute a grievance system. Individual workers hope this agitation will succeed because they will benefit

from the presence of a grievance system. However, a single worker hopes this success will come about without calling on his or her own efforts. Workers will be inclined to direct their energies in the pursuit of their individual private goods, not public goods. The private incentives to keep silent and to free ride on the activities of others are even greater when an employer has the power and authority to punish those who agitate for such workplace public goods. Hence public goods tend to be produced in inadequate amounts.[6]

The meager participation of employees in regulating their work environments means that these workplaces are remarkably oligarchic structures. Usually, important decisions are made by a relatively small number of managers, who involve workers in these issues only in a casual and haphazard way. In those instances when workers do participate, the extent and manner of worker participation are usually determined by management. When and insofar as it is in the interests of the managers to permit workers to participate in shaping their work environments, then some degree of worker participation will emerge, but it is largely by the grace of managers, not the result of workers exercising some right to participation.

How can this limited degree of worker participation be justified? The rejection of "exit" as a valid response to an authoritarian local government rests on several considerations, but one is that exit may require citizens to undertake considerable costs to uproot themselves and change residence, something that many would regard as unfair and probably inefficient.[7] The same point applies to workers for whom exit is the only available option in response to an unsatisfactory work environment. Indeed, in an economy composed of many authoritarian firms, a worker's sole option is to exit one firm and join another where he or she also lacks voice. If public goods supplied by local governments are judged to require voice mechanisms for the expression of residents' preferences in addition to the take-it-or-leave-it variety, why doesn't the provision of public goods by workplaces also require such mechanisms for the expression of workers' preferences in addition to the take-it-or-leave-it type?[8]

One answer has been the claim that hierarchically managed firms outperform other types of enterprises. Indeed, it is sometimes argued, a market economy has the feature that, if any other

management system were more efficient than the oligarchical system, market economy, this other system would now be dominant. This is a powerful argument because it maintains that, in effect, the loss in output and consumption that would result from permitting workers a voice in shaping their environment is too high a price to pay and that society has accepted the undemocratic nature of most business enterprises because the conventional system delivers the goods.

This book concerns this response. It takes up not the ethical questions of worker participation but rather the positive issue of the comparative performance of companies in which workers have a significant voice. There are many ways to evaluate this important issue. My method here is to describe two case studies. No single study is definitive, but the particular case studies here are at least instructive. I analyze a polar case of worker participation in which the workers' voice is expected to be loud and clear: this occurs when the workers not only participate in managing the workplace but also own it.

In this book I take up the principal empirical issues regarding "enterprise democracy" or worker cooperatives: the productive efficiency and long-run viability of such organizations; the degree to which they reduce "alienation" in the workplace and adversarial relations among different groups; the extent to which the cooperative firm's important decisions are determined by an active and involved workplace citizenry rather than by a narrow, entrenched oligarchy; and the responses of such enterprises to external shocks to which they must make some accommodation. The political argument for worker co-ops and worker participation will be more difficult to maintain if co-ops are shown to be inefficient and wasteful production units or if they are run not by the broad mass of workers but by a small, privileged elite. It is to assess the empirical content of these issues that this book is devoted. Before these questions are taken up, however, we must first consider the meaning of the management and ownership of companies.

OWNERSHIP AND MANAGEMENT

Two primary questions may be asked of any firm: who directs the firm's activities, and who appropriates the firm's net earnings?

The answers to these questions help to identify the individuals who have property rights over the firm's resources. In the conventional firm in the United States, the people who supply the organization's capital appropriate the net earnings of the enterprise, and as a consequence, they are designated the firm's owners.[9] These people also hire managers who direct the firm's activities. Such a firm is owned and indirectly managed by the people who provide the firm's capital assets. An economy dominated by such firms is aptly called "capitalist."

In capitalist firms, the managers, in turn, hire other workers. By this route, capital hires labor: those who supply the capital hire those who provide labor services. Such capital-managed organizations are owned by the capital investor, and the workers are called employees, whose jobs are subject to the discretion of the capital owners. In this book, a firm is labeled "capitalist" if the people who both direct the enterprise's activities and appropriate the organization's net returns are those who have supplied the firm's capital.

In the U.S. economy, many firms are not capitalist in this sense. For instance, many hospitals, schools, universities, and health maintenance organizations are structured as not-for-profit companies, and they often lack well-identified owners. Thus, for example, ultimate authority in the typical private university rests with the trustees, though they have usually supplied only a little of the university's capital. Another exception to capitalist firms is provided by the life insurance and property insurance industry, in which mutual companies are owned by those who hold the insurance policies. Here, by pooling risks, the consumers of the insurance policies effectively provide the capital and indirectly hire individuals to manage and run the companies.

Another exception is the firm that is owned and managed by the individuals who provide the labor services. In this instance, the workers use their own capital or borrow capital from others. They may hire managers to organize and coordinate production, in which case the managers serve at the pleasure of the workers. It is sometimes said that, in this last type of firm, labor hires capital. Such worker-owned and worker-managed firms occur in various guises in some of the professions (law, investment banking, medicine, accounting) and in jobs such as taxi driving, garbage collec-

tion, and trucking.[10] This type of firm is referred to throughout this book as a worker cooperative, or co-op.

The literature abounds with abstract arguments about co-ops—why they are or are not effective and durable organizations—but careful empirical research into the performance and operation of the cooperative enterprise is much less extensive. This book takes up these arguments and confronts them with the experience of two particular clusters of worker co-ops in the Pacific Northwest: those in the plywood industry and those established by forestry workers.

Ownership by Workers

The first distinguishing characteristic of a worker co-op is that the workers in the enterprise appropriate the net returns; hence the firm is owned by the people who work in it. Complete ownership of a firm by its workers is unusual in modern market economies. However, some firms are partly owned by those who work in them. Perhaps the best known in the United States are firms with employee stock ownership plans. In these companies, tax-deductible contributions of cash or stock are made by a corporation and placed in a trust whose assets are allocated to the employee participants in the trust. The assets of an employee stock ownership plan must be invested in the firm's stock. Hence through the plan, employees own a part of the assets of the firm that employs them.

Other benefit programs are designed to increase employee ownership, such as those that use a part of a firm's pension fund to purchase that firm's stock. Another case occurs when a company buys its own stock with funds deducted from an employee's wages and holds the stock in a special account for the employee. Some firms have established employee stock purchase plans, through which the firm matches a worker's contributions or pays brokerage fees. In these and other ways, employee ownership of companies is more extensive in the U.S. economy than is commonly realized. However, in general, only a small fraction of a firm's assets is owned by these worker-owners, and so it is not surprising that they have not been influential in determining policy by the firms' boards of directors.

Management by Workers

Another distinctive characteristic of a worker co-op is that the workers actively manage it. Again, in market economies, it is unusual for firms to be managed by the workers or by the representatives of workers, and representation by employees on a company's board of directors is rare. Some companies in the airline, trucking, and steel industries have granted their employees representation on their boards in return for wage concessions, but most workers who have acquired ownership through employee stock ownership plans or other compensation programs have no such representation.[11] This means they are not consulted on the larger issues of company policy.

However, as already noted, workers are sometimes involved in matters concerning their immediate work environments. The most obvious mechanism for this in the United States has been the labor union, which normally engages with management not only in setting wages but also in determining a wide range of activities within the firm. Although the union is not "the management," through collective bargaining it collaborates with the representatives of the firm's owners to shape the work environment. Indeed, where labor relations are harmonious, a unionized workplace is one jointly administered by management and the union.

Although there are other mechanisms that involve workers in managing their workplaces, it is unusual for workers to combine ownership with management; that is, for the workers to own a significant proportion of the assets of the firms they work in and for these same workers to play a heavy role in managing the company. Perhaps the best-known example in the United States today of a company with significant worker ownership is United Airlines, whose airline pilots and machinists own 55 percent of the stock. The purchase of the company's stock took place over seven years starting in 1994, and the stock was placed in the workers' retirement accounts. However, an important fraction of employees (principally, the flight attendants) are not owners; in addition, there have been serious divisions among machinists and among pilots about the wisdom of the venture.[12] United Airlines prospered for five years after the establishment of the new ownership structure, with record profits and employment growth of 33 per-

cent; but more recently the company's success has been much less certain. Obviously, it is too early to draw inferences from the United Airlines experience.

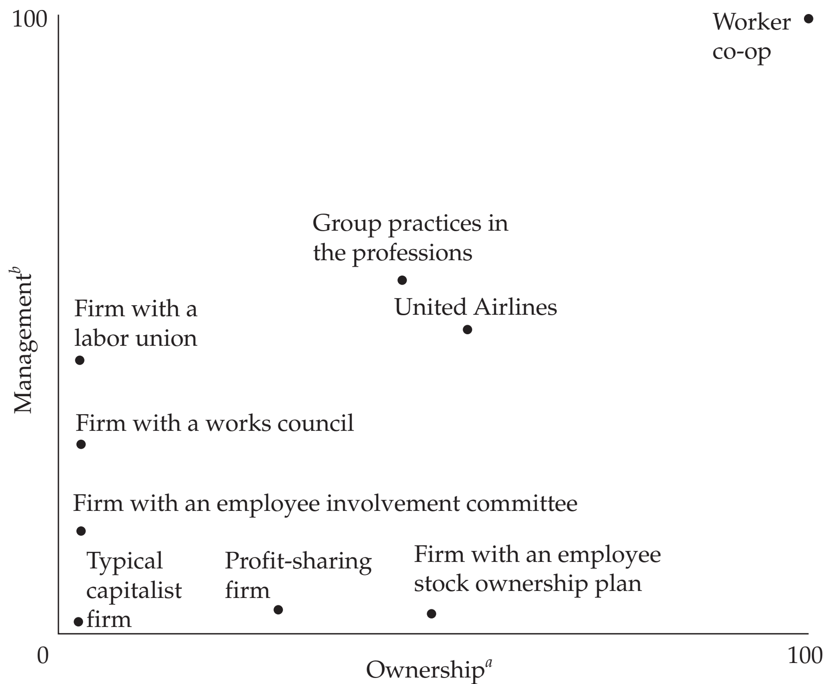
An Organizing Framework of Ownership and Management

The distinction between a firm's ownership and its management lends itself to an organizing framework, as illustrated in figure 1.1.[13] The horizontal axis of the figure measures the degree to which the firm's net earnings are allotted to the firm's workers. The typical capitalist firm, which is "owned" by those who supply the capital, occupies a point on the far left of this axis because in such a firm the workers' pay is dependent on their input of time and is considered a cost of doing business, independent of the firm's profits. A workers' co-op occupies a position on the far right of this axis because all the firm's net returns are distributed to all the workers. Between these two extremes are firms that engage in some profit sharing with the workers and firms with employee stock ownership plans.

The vertical axis measures the degree to which the firm's workers are involved in managing the company in which they work. In the typical capitalist firm, those who supply the capital select the managers, who, in turn, select and direct the workers. Hence in figure 1.1 the typical capitalist firm occupies a position on the horizontal axis close to the graph's origin. By contrast, a firm in which the workers select the managers and are closely involved in directing the firm's activities occupies a position that corresponds to a high point along the vertical axis. The worker co-ops described in this book come close to this description. Intermediate positions on the vertical axis between the typical capitalist firm and the worker co-op are occupied by firms with employee involvement committees, works councils, and labor unions.

A few firms—such as United Airlines—have elements of both worker management and worker ownership and so occupy points in the middle of the figure. Group practices in the professions, such as those involving physicians, accountants, and lawyers, also occupy such intermediate positions because the partners tend to share the net returns and to assume responsibility for managing the firm. However, in such professional practices, control and

Figure 1.1 / Organizing Framework of Firms, by Extent of Worker Involvement



Source: Author's configuration.
[a]Percentage of firm's total net earnings allocated to workers.
[b]Percentage of firm's total management activities performed by workers.

ownership are typically restricted to the most experienced or skilled workers in the organization, and the organization's remaining workers are conventional employees.

The enterprises analyzed in this book are located in the top right-hand corner of figure 1.1. These are compared with firms located close to the vertical axis in the figure. Some of the comparison firms are unionized and some are not. I argue (in chapter 4) that the effects of worker ownership and management tend to be complementary—that is, the benefits of worker ownership are enhanced when workers are engaged in the management of the organization.

THE CASE FOR THE WORKER CO-OP

There are long-standing arguments that worker ownership of a firm's assets and worker participation in a firm's management provide benefits over typical capitalist firm arrangements. At the center of the argument regarding ownership is the conflict that arises over the distribution of a typical capitalist firm's returns between labor and capital. This conflict takes an extreme form when, as is usual, each worker is paid according to his or her input of time—hourly, weekly, or monthly earnings. When pay is related to time spent at work but unrelated to effort, one of the tasks of supervisors must be to monitor workers to ensure that some minimum level of effort is exerted. Because the workers see their payments as approximately fixed (their wages and hours of work have usually been specified), greater work effort on their part appears to benefit not them but the owners of capital. The workers view the task of the supervisors to be that of hounding the employees to make them work harder. Tension then develops between the supervisors and the rank-and-file workers: the supervisors' jobs turn on extracting the most effort out of the workers, while the workers resent being monitored and resist attempts to be pushed harder. Other sources of conflict exist in the workplace, but at the heart of each is the perspective that employment is a zero-sum game, that one group gains only when the other group loses.

A worker co-op addresses this conflict by making those who supply labor also those who supply capital. Cooperation in the workplace occurs because the interests of capital and labor are aligned: when the workers own the firm's assets, individuals will work with more commitment and diligence because they enjoy the returns to both labor and capital. The same argument is used to explain why self-employed individuals work harder and more effectively than employees who work for someone else. In the worker co-op, all the workers are self-employed.

The benefits derived from relating workers' pay not to their input of time but to the firm's performance is well recognized by those who advocate some form of profit- or sales-related pay in capitalist firms. In this circumstance, work incentives are furthered by connecting workers' pay to the market success of the enter-

prise's product. In the capitalist firm, however, profit-related pay schemes distribute to workers only a fraction of profits. If profit-related pay provides incentives for individuals to work more effectively, then these incentives cannot be any less in the worker co-op, which distributes all profits, than in a firm that distributes only a fraction of profits to its employees.

The argument for worker participation in management rests on the intuitively appealing notion that participation begets productivity, that individuals work more effectively toward goals they have helped to define and determine. When workers are uninvolved in determining an organization's goals, they are less dedicated to those goals and less motivated to see them realized. It has long been argued that there are potential productivity gains to an organization in which workers participate meaningfully in decision making.[14] A large literature has emerged attempting to quantify the impact of worker participation on productivity, although this work falls short of being really persuasive.[15] The empirical research has been unconvincing for a number of reasons. One reason is that it can be difficult to obtain a reliable indicator of worker participation: two firms may have employee involvement committees, and yet one firm's committee may have much greater practical influence than the other firm's. The result is that worker participation can be more apparent than real.

The extreme case of worker participation occurs when workers have full discretionary powers and both manage and own the enterprises for which they work. If the productivity consequences of participation are not visible when workers are the firm's owners, those consequences are less likely when workers participate to a much lesser extent. Hence there is good reason to examine a situation in which workers own their own firms and to determine whether the beneficial effects of participation are evident here.

By granting workers authority over decision making within the organization and by relating workers' pay to the firm's residual earnings, the worker co-op realigns the cardinal rights associated with the ownership of a firm: the right to control the organization's activities and the right to appropriate the organization's net earnings. As already noted, one of these rights can be enjoyed without the other: an employee stock ownership plan in a capital-owned firm ties the wealth of employees to the firm's success, but

in most cases the employees lack control of the firm's activities; on the other hand, employee involvement programs grant workers some control rights (because workers participate in making decisions about production), but they are not entitled to receive a share of the firm's net earnings. In the worker co-op, workers enjoy both control rights and rights to residual earnings.

THE DEFECTS OF THE WORKER CO-OP

If the benefits to worker ownership combined with worker control are evident, why haven't such firms become more common? The traditional answer points to serious defects with the worker co-op. One purported defect is that, although each worker's income depends upon the firm's net earnings, the incentives provided by relating each worker's income to the firm's performance are meager because the firm's net earnings are divided among a large number of people. This means that the benefits of harder work to any single individual are small. Each worker wants others to work hard while he himself slackens off. Soon every worker thinks this way, and the firm consists of a body of malingerers. A supervisor is needed to ensure that incentives are not dulled, and the firm returns to the character of a capitalist firm, where worker effort is carefully monitored.

A second frequently cited defect with the worker co-op arises from various problems concerning its financial capital. If the workers are to provide the capital, then the capital of the firm is constrained by the workers' joint savings. Sometimes this constraint will mean that insufficient capital is available for the firm to reach a size that maximizes efficiency; this capital limitation induces the co-op to borrow from financial intermediaries. Many banks view the co-op as an unfamiliar organization, however, and fear that the co-op's worker-owners will give priority in allocating their returns to paying themselves dividends instead of repaying loans. Hence banks are reluctant to lend to worker-owned organizations. Other issues relating to the co-op's capital market problems are discussed in chapter 2. From the experience of the worker co-ops in the Pacific Northwest, these problems seem to be serious ones.

Another objection raised against the worker co-op is its "perverse" response to market signals. In the capitalist firm, a rise in

product price provides the signal to produce and sell more. In this way, resources in the market are allocated toward producing those commodities for which consumers are willing to pay a higher price. By contrast, it is sometimes argued, in a worker co-op, when the output price rises, the workers can enjoy the same income by producing less. In this event, even though consumers are willing to pay a higher price for the product, which would suggest that more of the product should be produced, the worker co-op responds by producing and selling less. The market signals are not working well, according to this argument, if firms produce less when prices rise and produce more when prices fall. Would an industry function in this way if all the producers were worker co-ops?

The worker co-op has also been accused of being an inherently unstable type of organization. According to this argument, if the co-op is successful and makes profits, the worker-owners have an incentive to share the organization's capital returns among the original investors only and to use hired labor to replace departing members. In this way, although at the start all workers are owners, over time the character of the co-op changes, so that an increasing fraction of workers are not co-op members. Ultimately, the organization is indistinguishable from a conventional firm in which ownership is concentrated in the hands of a few who select the managers and in which most of the workers are employees. This transformation of the co-op has concerned proponents of worker ownership, who have described this process as one of degeneration: the co-op "degenerates" over time into a conventional capitalist organization. Does this process have empirical validity? More generally, how do the abstract arguments for and against worker co-ops compare with the experiences of the two clusters of co-ops in the Pacific Northwest?

ORGANIZATION OF THIS BOOK

The analysis of the plywood co-ops presented in this book rests principally on research that Ben Craig and I have conducted. About fifteen years ago, we embarked on a project to study the plywood co-ops of the Pacific Northwest. We collected data on the activities of some forty mills (both co-ops and capitalist firms) in

Washington State over a period of twenty years. Together these mills represent the vast proportion of plywood production in Washington State. In other words, we examined almost the entire population of mills rather than merely a sample of them. We also collected information on the prices of the shares of co-ops in Washington and Oregon over a period of thirty years. This work on the share prices has been extended into the 1990s. In this volume, I also draw upon the research of others. Some of this work—such as that undertaken by Katrina Berman (1967), Henry Dahl (1957), Edward Greenberg (1986), and Christopher Gunn (1984)—is extremely informative, and our understanding of the plywood co-ops now constitutes a sophisticated body of knowledge.

I augment this description and analysis of the plywood companies in the Pacific Northwest with a discussion of another set of co-ops in the same region, the forest workers' co-ops. These co-ops, established in the early 1970s, were initially organized to serve the demands for reforestation. Some of the co-ops diversified their activities to embrace other forest-related work and even some construction. By the late 1970s, there were an estimated twenty-three co-ops in the forestry industry in Oregon, Washington, California, and Idaho, with an aggregate membership of close to one thousand people. In the 1980s, however, reduced demand for and increased supply of forest workers dealt mortal blows to the forestry co-ops.

The following chapter, chapter 2, begins with a brief overview of the plywood co-ops and the forest workers' co-ops, emphasizing the environment in which they have operated and which has constrained their activities. It then takes up the class of questions concerning the internal organization of these co-ops and their use of labor and capital. It addresses the following perennial questions of co-ops: Is malingering a problem in a workplace in which a single worker's earnings are linked to the entire organization's performance? In an organization in which every worker is a boss, is production handicapped by internal wrangling? Is work in a co-op less "alienating" an experience than work in a traditional firm? Do worker co-ops suffer from inadequate sources of capital? Has co-op membership been financially profitable?

Chapter 3 addresses the key questions of the productivity and profitability of the co-ops compared with conventional firms and

asks what sort of general objectives a worker co-op reveals. Whose interests are best served? What is learned from the movements in the share prices of co-ops? As mentioned earlier, advocates of the worker co-ops have long been concerned that the co-op organization tends to evolve over time into a conventional firm in which ownership and decision making are concentrated in the hands of a few people—the problem of degeneration. How does the experience of the worker co-ops in the Pacific Northwest inform this important issue?

Chapter 4 draws general lessons from the experiences of these co-ops in the Pacific Northwest and speculates on what these lessons imply for the organization of production in the United States as a whole. The experiences of the plywood co-ops and the forest workers' co-ops suggest that co-ops are an uncommon form of production organization because of their capital market difficulties, including the fact that they expose their worker-owners to unusual and disproportionate risk. However, if these risks and other problems can be overcome, there are some demonstrated advantages to the co-op form of organization—productivity benefits as well as the civic virtue of allowing workers a voice in determining their workplace environments.

Indeed, most of the benefits from the co-op form of organization stem at their base from active worker participation in decision making on issues that profoundly affect them. Fundamentally, the success of the worker co-ops of the Pacific Northwest testifies to the benefits of involving workers in the organization of their workplace environments. If these benefits are to be enjoyed by many more workers in the United States, existing labor laws must be reformed, participatory programs encouraged, and a richer public discussion about worker ownership initiated.