Introduction

We tend to take it for granted that, in the absence of government intervention, large-scale enterprise will be organized in the form of investor-owned firms. Thus the term "capitalism," with its implication that the means of production are owned by investors of capital, remains the name commonly given to the system of economic organization found in Western Europe, North America, and Japan. Yet investor ownership is not a logically necessary concomitant of free markets and free enterprise. Rather, it is quite contingent, a form of organization that is often but not always dominant given current technologies.

Even in the United States, the world's great exemplar of corporate capitalism, non-investor-owned enterprise plays a prominent role in many important industries. Employee-owned firms have long been widespread in the service professions—such as law, accounting, investment banking, and medicine—and are now expanding in other industries as well. The recent employee buyout of United Air Lines is a conspicuous instance. Farmer-owned producer cooperatives dominate the markets for basic agricultural commodities. Consumer-owned utilities supply electric power to 10 percent of the population. Key firms such as MasterCard, Associated Press, and True Value Hardware are service and supply cooperatives owned by local businesses. Occupant-owned condominiums and cooperatives are rapidly displacing investor-owned rental housing. Mutual companies owned by their policyholders sell half of all life insurance and a quarter of all property and liability insurance. And nonprofit firms, which have no owners at all, account for most nongovernmental hospitals, colleges, schools, and daycare centers, as well as a large share of the nation's nursing homes, health maintenance organizations, and health insurance companies.

The United States is not unusual in this regard. Non-investor-owned enterprise plays a similarly large role in other developed market economies. That role is continuing to expand, and is conspicuously larger in advanced economies than it is in less-developed economies.

In this book I explore the reasons for this diverse pattern of ownership. I seek to explain why different industries, and different national economies, exhibit different distributions of ownership forms. Toward this end, I try to offer a broader perspective on the character and functions of ownership in general, providing insight not only into forms of ownership that are frequently neglected but into investor ownership as well. I also seek to illuminate the roles that alternative forms of ownership can and should play in the future.

I draw my analytic tools principally from economics and particularly from recent work on the organization of the firm. More specifically, this book is largely in the tradition of the "new institutional economics," which is distinguished by its focus on transaction costs and information costs. Yet while I rely heavily on economic analysis, I also bring other perspectives to bear where appropriate, paying particular attention to the characteristics of different structures for decision making, to historical processes, and to the legal and regulatory systems within which firms are organized. I have tried to make the book accessible to noneconomists, and have confined technicalities and discussion of the literature to the notes wherever possible.

The primary focus of the book is on those firms—such as broadly held business corporations, partnerships, cooperatives, and mutual companies—in which ownership is shared among numerous persons. One reason for this emphasis is the dominance of these firms in contemporary economies. Another reason is that widely shared ownership gives rise to special problems that call for focused attention. To create a viable firm in which ownership is shared among persons who have diverse interests is difficult, and the problems involved—what might be termed the internal politics of the firm or, more abstractly, the costs of collective decision making—have a critical bearing on the patterns of ownership that we observe and the ways in which firms are structured internally. This fundamental issue has received far too little attention.

What Can Be Learned?

At the narrowest level, this book addresses a variety of questions about particular forms of ownership. Why, for example, is investor ownership the dominant, yet far from universal, form of ownership in all modern market economies? Why have employee-owned firms traditionally been so common among service professionals and so rare in other services and in industry? Why has the latter pattern begun to change so rapidly in recent years, as investor-owned firms have displaced partnerships among service professionals while, at the same time, employee ownership has been spreading in the industrial sector? Why are consumer cooperatives so common—far more so than is generally realized—among wholesale and supply firms but so rare among retail firms? Why is it that, while farmer-owned and worker-owned firms are common, other forms of producer cooperatives are rare? Why has condominium housing, which was effectively nonexistent in the United States before 1960, spread so explosively through the nation's real estate markets in recent decades? Why did mutual companies play a more dominant role in insurance and banking in the nineteenth century than in the twentieth, and do they continue to serve an important function today? And why—to turn to a much smaller but nonetheless intriguing sector—are there not more investor-owned golf courses?

But one need not have a strong interest in alternative forms of ownership to find the comparative study of organizational types instructive. The exercise has important lessons even for those whose interests are largely confined to investor-owned enterprise. Analysis of the role and performance of partnerships, cooperatives, mutuals, and nonprofits provides a useful means of measuring the managerial efficiency of conventional business corporations and deepens our understanding of the ways in which, and the extent to which, product markets and capital markets—including the market for corporate control—serve to police that efficiency. To look at investor-owned firms in isolation, as the existing literature has largely done, is often misleading. We learn much more about them by comparing them with other forms of enterprise. Otherwise, as a statistician might put it, there are too few degrees of freedom, and too little variance, to assess the influence of key variables.

The study of alternative forms of ownership also offers insight into broader issues concerning social organization in general. For example, it provides perspective on the extent to which the vagaries of history determine the character of the organizational forms that appear in contemporary societies. More specifically, it permits us to appreciate the processes and the speed with which anachronistic organizational forms are replaced by more efficient ones. It also allows us to explore the ways in which legal structure—including organizational law, tax law, and regulatory law—governs organizational evolution. And it even helps us to see whether and to what degree organizational change drives, or is driven by, legal change.

Finally, since a firm that has numerous owners must employ some form of collective choice mechanism through which those owners can exercise control, all such firms necessarily have a strongly governmental, or political, character. Examining the forms and performance of these collective choice mechanisms allows us to acquire important knowledge about political institutions in general. In fact, because collectively owned firms are so numerous and so varied, and because they are subject to the forces of market selection, for many purposes they provide a better means of studying political institutions than do the governmental entities that are the usual focus of work in political science. By studying the structure of ownership in private firms we gain a strikingly strong perspective on the relative virtues of politics and markets in governing social activity—a question that has been at the center of Western political and economic debate for much of the past two centuries.

The perspective on these issues that this book offers might be useful even if it involved no more than a reaffirmation and extension of prevailing ideas. In fact, however, the evidence assembled here indicates that, in fundamental ways, the conventional wisdom about the forces guiding choice of organizational form is often misleading or mistaken. For example, the capital intensity of an industry and the degree of risk inherent in the industry both play a much smaller role than is commonly believed in determining whether firms in that industry are investor-owned. Similarly, the agency costs of delegated management—the "separation of ownership and control"—that are so much a focus of current literature on the economics of organization are at best of secondary importance in determining which organizational forms are viable; indeed, tight managerial discipline is a two-edged sword that can severely increase a firm's costs of contracting with nonowners. Employee ownership offers much stronger efficiencies than it is generally credited with, and would be far more widespread if it were not critically handicapped by the very thing that is often considered its greatest virtue, namely, the opportunity it affords for active worker participation in governance. Nonprofit firms commonly compete quite effectively with for-profit firms even in the absence of public or private subsidies. And governmental consumer protection regulation has often played a critical role in permitting investor-owned enterprise to vie with, and ultimately displace, cooperative, mutual, and nonprofit firms.

Social Science and Social Policy

This book is largely an exercise in positive, or descriptive, social science. As such, its principal purpose is to explore, as objectively as possible, the reasons for the patterns of enterprise ownership that we observe. Yet it has an important policy dimension as well.

There is considerable enthusiasm today for promoting forms of ownership other than the conventional investor-owned corporation. Much of this interest centers on labor-managed enterprise and reflects an unusual convergence of economic thought from opposite ends of the political spectrum. On the left, recent years have brought the final collapse of state socialism as a persuasive economic ideal throughout the world. In the resulting ideological void, "workplace democracy" has emerged as the principal institutional reform that commands widespread support among critics of capitalism. Worker control of enterprise, it is hoped, will succeed where state control has failed in equalizing power and wealth and in decreasing worker alienation and exploitation. Reformers on the right, in turn, have become increasingly discouraged with the efficiency of traditional forms of labor-management relations. As an alternative, many have turned to employee ownership, hoping that it will improve productivity and increase worker identification with the interests of capital.

This enthusiasm for worker-owned enterprise has begun to be translated into policy. Employee ownership is now promoted in the United States by large tax subsidies, by exceptional provisions in the pension laws, and by special corporation statutes for employee-owned firms. In Western Europe, worker codetermination is now mandated for all large enterprise in Germany and has been proposed for the European

Community as a whole. And in the formerly socialist countries of Eastern Europe there is widespread interest in worker ownership for newly privatized state enterprise. Yet the wisdom of all such policies remains subject to intense debate.

Issues of ownership are also central to important problems of policy in a variety of other areas. For example, does the rapid conversion of rental to condominium housing represent an improvement in welfare, or is it a costly inefficiency induced by rent control and tax subsidies? Is the domination of the agricultural markets by farm marketing cooperatives an efficient response to market imperfections and scale economies, or is it simply cartelization at the expense of consumers? Do nonprofit hospitals, health insurance companies, and health maintenance organizations serve a valuable function that the rapidly expanding investor-owned firms in those industries do not, or are they just inefficient anachronisms?Does the recent rapid growth in mutual liability insurance companies offer a promising remedy for the insurance crisis? Might the costly collapse of the savings and loan industry have been averted if stock firms had not been so freely permitted to displace mutual firms in that sector? Is consumer ownership of utilities a promising way to avoid the inefficiencies of both private monopoly and public rate regulation? Does collective ownership of a franchisor by its franchisees avert the problems of opportunism to which franchise contracting is otherwise prone?

More generally, the basic legal framework that governs different forms of enterprise ownership has developed ad hoc, without systematic thought as to the functions played by the various forms or to their interrelationships. The corporation statutes governing cooperative, nonprofit, and mutual companies are generally poorly structured and vary widely from one jurisdiction to another. Tax law, which has been designed principally with the conventional investor-owned firm in mind, creates systematic biases for and against other ownership forms. And alternative forms of ownership operate under special regulatory and antitrust regimes that have never been well rationalized.

In the past, it has been difficult to deal clearly with any of these issues because we have lacked a coherent understanding of the roles that are, can be, or ought to be played by the various forms of ownership involved. I hope to provide the basis for a more informed approach.

Ideology

Much of the existing literature on ownership, and particularly on worker-owned and consumer-owned enterprise, reflects some degree of ideological commitment. Authors frequently come to the subject with a passion either to advocate or to discredit a particular form of ownership. I try here, in contrast, to be relatively disinterested. Although nobody is unblinkered by ideology, I do not consciously bring to this project strong commitments either for or against any particular form of ownership in itself, whether investor-owned, worker-owned, consumer-owned, producer-owned, nonprofit, or governmental. Indeed, I believe the evidence indicates that a broad range of ownership types have useful roles to play in modern economies and that those roles vary with time and circumstance. The principal objective of this book is to analyze those roles.

Comparative Perspectives

The primary focus here is on institutions in the United States. I do, however, pay considerable attention to patterns of institutional development in other countries both to affirm and, where necessary, to qualify the generality of the conclusions offered. In fact, as subsequent chapters illustrate, the distribution of ownership types in the United States is strikingly similar to that found in other market economies, and where differences appear they are generally explicable in terms of the same considerations that explain the U.S. pattern. Consequently the book should have nearly as much value in understanding other economies as it does in understanding the United States.

Nonprofit and Governmental Enterprise

The principal focus of this book is on firms that are privately owned in one fashion or another. But the book's analytic framework is also helpful in understanding when it is efficient for a firm to have no owners at all—that is, to be organized as a nonprofit institution. Moreover, since nonprofit firms are the asymptotic extreme in the separation of ownership and control, their study throws important light on the characteristics of owned enterprise. Part IV devotes specific attention to nonprofit enterprise.

The role of public enterprise is an important issue that deserves much more thoughtful attention than it has received. That role is, I believe, usefully illuminated by the book's analytic framework. Nevertheless, I do not offer an extended discussion of public enterprise. Rather, I deal with it only where necessary to explore important questions about the role and structure of private enterprise, as in the case of the utilities examined in Chapter 9 and the exclusive residential communities discussed in Chapter 10.

Organization of the Book

The three chapters in Part I offer a general theory of enterprise ownership. Subsequent chapters then employ that theoretical framework to explore the role played by particular forms of ownership in particular industries. The chapters dealing with specific industries or organizational forms in Parts II–IV are mutually supporting and cumulative. One can learn much more about the strengths and weaknesses of different organizational forms by comparing them with one another, or by observing how the same form fares in different industries, than one can learn simply by observing a single form within a single industry. Thus one gains an important perspective on problems of governance and capital supply in worker-owned firms (Chapters 5 and 6) by studying farm supply cooperatives (Chapter 8) and housing cooperatives and condominiums (Chapter 11). The significance of the separation of ownership and control in investor-owned firms (Chapter 4) is similarly illuminated by comparing those firms with wholesale and supply cooperatives (Chapter 8) on the one hand and with nonprofit and mutual firms (Chapters 12–14) on the other.

For all the interest in organization theory today, the comparative study of organizations remains much neglected. I hope to prove that it has impressive things to teach us.

Part I

A Theory of Enterprise Ownership

1

An Analytic Framework

A firm's "owners," as the term is conventionally used and as it will be used here, are those persons who share two formal rights: the right to control the firm and the right to appropriate the firm's profits, or residual earnings (that is, the net earnings that remain with the firm after it has made all payments to which it is contractually committed, such as wages, interest payments, and prices for supplies). The reference to "formal" rights in this definition is important. Formal control, for instance, does not necessarily mean effective control. In firms that are incorporated—which comprise most of the institutions of interest to us here, including business corporations, cooperatives, nonprofits, and mutual companies—formal control generally involves only the right to elect the firm's board of directors and to vote directly on a small set of fundamental issues, such as merger or dissolution of the firm. Moreover, in large business corporations the shareholders, who hold formal control, are often too numerous and too dispersed to exercise even these limited voting rights very meaningfully, with the result that corporate managers have substantial autonomy. Hence it has long been common to speak of "the separation of ownership from control," reflecting the substantial autonomy of corporate managers. 1

? wrong to say separation of ownership from control ?

Nevertheless, I shall principally be concerned with exploring assignment of the *formal* legal or contractual rights to control and residual earnings. As we shall see in the chapters that follow, there are often strong reasons for giving the formal right of control to a particular class of persons even when those persons are not in a position to exercise that right very effectively. For this reason, among others, the assignment of these formal rights—which is to say, the assignment of ownership—tends to follow strong and clear patterns.

In theory, the rights to control and to residual earnings could be separated and held by different classes of persons. In practice, however, they are generally held jointly. The obvious reason for this is that, if those with control had no claim on the firm's residual earnings, they would have little incentive to use their control to maximize those earnings, or perhaps even to pay out the earnings received. To be sure, this problem would not arise if all important decisions to be made by those with control could be appropriately constrained in advance by contractual arrangements between them and the holders of the rights to residual earnings. But the essence of what we term "control" is precisely the authority to determine those aspects of firm policy that, because of high transactions costs or imperfect foresight, cannot be specified ex ante in a contract but rather must be left to the discretion of those to whom the authority is granted.[2]

Not all firms have owners. In nonprofit firms, in particular, the persons who have control are barred from receiving residual earnings. As we shall see, however, the same factors that determine the most efficient assignment of ownership also determine when it is appropriate for a firm to have no owners at all.

The Structure of Ownership

In the discussion that follows, it will be helpful to have a term to comprise all persons who transact with a firm either as purchasers of the firm's products or as sellers to the firm of supplies, labor, or other factors of production. I shall refer to such persons—whether they are individuals or other firms—as the firm's "patrons."

Nearly all large firms that have owners are owned by persons who are also patrons. This is obvious in the case of consumer and producer cooperatives, which by definition are firms that are owned, respectively, by their customers and by their suppliers. It is also true of the standard business corporation, which is owned by persons who lend capital to the firm. In fact, the conventional investor-owned firm is nothing more than a special type of producer cooperative—a lenders' cooperative, or capital cooperative. Because we so commonly associate ownership with investment of capital, and because the comparison of

investor-owned firms with cooperatives of other types will be at the core of the analysis that follows, it is worthwhile to elaborate briefly on this point.

Consider, first, the basic structure of a typical producer cooperative. For concreteness, we can take as a simple, stylized example a dairy farmers' cheese cooperative, in which a cheese factory is owned by the farmers who supply the factory with raw milk. (The example is not fanciful; farmer-owned cooperatives account for 45 percent of all natural cheese produced in the United States.)[3] The firm pays its owners—or "members," as they are usually termed in a cooperative—a predetermined price for their milk. This price is set low enough so that the cooperative is almost certain to have positive net earnings from the manufacture and sale of its cheese. Then, at the end of the year, the firm's net earnings are divided pro rata among the members according to the amount of milk they have sold to the cooperative during the year, and distributed as patronage dividends. All voting rights in the firm are also apportioned among its farmer-members, either according to the amount of milk each member sells to the firm or, more simply, on a one-member-one-vote basis. Some or all of the members may have capital invested in the firm. In principle, however, this is unnecessary; the firm might borrow all of the capital it needs. In any case, even where members invest in the firm, those investments generally take the form of debt or preferred stock that carries no voting rights and is limited to a stated maximum rate of dividends. Upon liquidation of the firm, any net asset value—which may derive from retained earnings or from increases in the value of assets held by the firm—is divided pro rata among the members, according to some measure of the relative value of their cumulative patronage.

In short, ownership rights are held by virtue of, and proportional to, one's sale of milk to the firm. Not all farmers who sell milk to the firm need be owners, however; the firm may purchase some portion of its milk from nonmembers, who are simply paid a fixed price (which may be different from the price paid members) and do not participate in net earnings or control.

The structure of a consumer cooperative is similar, except that net earnings and votes are apportioned according to the amounts that members purchase from the firm rather than the amounts they sell to it.

Now imagine a hypothetical "capital cooperative" with a form precisely analogous to that of the dairy cooperative. The members of the capital cooperative each lend the firm a given sum of money, which the firm uses to purchase the equipment and other assets it needs to operate (say, to manufacture widgets—or cheese). The firm pays the members a fixed interest rate on their loans, set low enough so that there is a reasonable likelihood that the firm will have net earnings after paying this interest and all other expenses. The firm's net earnings are then distributed pro rata among its members according to the amount they have lent, with the distributions taking place currently, as dividends, or upon liquidation. Similarly, voting rights are apportioned among members in proportion to the amount they have lent the firm. To supplement the capital that it obtains from its members, the firm may borrow money from lenders who are not members, but who simply receive a fixed rate of interest (which may be different from the fixed rate paid to members) without sharing in profits or control.

This hypothetical capital cooperative is, transparently, a producers' cooperative just as is the dairy cooperative. Yet this capital cooperative in fact has precisely the structure that underlies the typical business corporation. If this is not immediately obvious, it is perhaps just because, in a business corporation, the fixed interest rate paid on loans from the firm's lender-members—whom we conventionally term "shareholders" or "stockholders"—is typically set at zero for the sake of convenience, thus obscuring the fact that the members' contributions of capital are, in effect, loans.

To be sure, there are also various other ways in which capital cooperatives (that is, business corporations) are often structured a bit differently from other types of cooperatives. For example, in a business corporation the loans from members are usually not arranged annually or for other fixed periods, but rather are perpetual; members can withdraw their capital only upon dissolution of the firm, although an individual member may be free to sell his or her interest in the firm to another person before then. In other types of cooperatives, in contrast, members often remain free to vary the volume of their transactions with the firm over time, and even to terminate their patronage altogether. This distinction is not, however, fundamental. Investor-owned business corporations sometimes permit members to redeem their invested capital at specified intervals or even (as in the standard partnership) at will; open-ended mutual funds are a familiar example. Conversely, cooperatives often require that members make a long-term

commitment to remain patrons. For example, electricity generation and transmission cooperatives commonly insist that their members, which are local electricity distribution cooperatives, enter into thirty-five-year requirements contracts.[4] Agricultural marketing and processing cooperatives, such as the cheese cooperative just described, often require that their members commit themselves to sell to the cooperative a given amount of their production each year for a period of several years.[5] And mutual life insurance companies, which are essentially consumer cooperatives owned by their policyholders, originally issued only nonredeemable policies that committed policyholders to make premium payments—that is, to continue to purchase a specified amount of insurance from the firm—for the rest of their lives.[6]

Redeemability / Residual earnings

The allocation of voting rights is another area where business corporations often differ somewhat from other types of cooperatives. In business corporations, the general rule is one-share-one-vote; that is, votes are apportioned according to the amount of capital contributed to the firm. In many cooperatives, in contrast, the rule is one-member-one-vote, with no adjustment for the volume of patronage of the individual members. Again, however, the difference is neither universal nor fundamental. The charters of many eighteenth- and nineteenth-century American business corporations limited the number of votes an individual shareholder could exercise regardless of the number of shares he owned; only in the twentieth century did the practice of one-share-one-vote become nearly universal.[7] And, while the statutes governing cooperatives sometimes still impose a rule of one-member-one-vote, this is not universal and many cooperatives allocate votes proportionally to their members' volume of patronage. (We shall consider later why these different voting rules arose and survived.)

In sum, a business corporation is just a particular type of cooperative: a cooperative is a firm in which ownership is assigned to a group of the firm's patrons, and the persons who lend capital to a firm are just one among various classes of patrons with whom the firm deals.

Conversely, supplying capital to the firm is simply one of many transactional relationships to which ownership can be tied, and there is nothing very special about it. Ownership of a firm need not, and frequently does not, attach to investment of capital. Indeed, contrary to some popular perceptions and even to some more sophisticated organizational theory, ownership of the firm need have nothing to do with ownership of capital, whether physical or financial.[8]

To be sure, it might be argued that ownership is necessarily connected to capital in the sense that the owners of a firm, whether they are suppliers or customers or workers or whatever, are the persons who effectively own the firm's capital, such as its plant and equipment. For example, in our cheese cooperative, one might argue that the farmer-members own the firm's capital in the sense that they collectively have title to, and will profit or lose from fluctuations in the value of, the cheese factory's plant and equipment.

But this is not necessarily true. The firm could rent rather than own the land, buildings, and equipment it uses. It could in fact have title to no physical assets whatever yet still be a large and prosperous firm.[9] It could even have no net financial assets, distributing all profits to members as they are earned and maintaining a line of credit at a bank sufficient to ensure that it can pay bills in periods when expenses temporarily exceed receipts.[10] The members of the cooperative might *choose* to invest some of their personal funds in the firm, or to have the firm retain some of its profits for internal investment. Indeed, as subsequent chapters will discuss at greater length, there are good reasons why the owners of most types of firms, including producer and consumer cooperatives, choose to invest some financial capital in the firm they own. But it is not *necessary* that owners of a firm also be investors in the firm.

Even though the ordinary business corporation is, as I have just argued, essentially a lenders' cooperative, I shall continue to follow the usual convention here and generally use the term "cooperative" to refer only to patron-owned firms *other than* investor-owned firms.

The Structure of Organizational Law

From these observations we can gain a helpful perspective on the general structure of corporation law.

In the United States, basic corporation law is state law rather than federal law. The typical state has three general corporation statutes: a business corporation statute, a cooperative corporation statute, and a nonprofit corporation statute. Most of the organizations we shall be concerned with in this book are formed under one or another of these three types of statutes. (There are, however, a number of exceptions. For example, mutual banks, mutual insurance companies, and housing condominiums are often formed under special corporation statutes

specifically designed for them. And the employee-owned firms that are common in the service professions are often formed as partnerships or professional corporations, which are also governed by separate statutes.)

A cooperative corporation statute typically accommodates all types of producer and consumer cooperatives, from retail grocery cooperatives on the one hand to farm processing and marketing cooperatives, such as our cheese factory, on the other. Once it is understood that investor-owned firms are in essence capital cooperatives, it follows that in principle investor-owned corporations could also be formed under cooperative corporation statutes rather than, as is customary, under the separate business corporation statutes.[11] There is no fundamental reason to have business corporation statutes at all; they are just specialized versions of the theoretically more general cooperative corporation statutes. It is appropriate to have separate business corporation statutes simply because it is convenient to have a form that is customized for the most common type of cooperative—the lenders' cooperative—and to signal to patrons more clearly the type of cooperative with which they are dealing.[12] For similar reasons, some agricultural states have separate corporation statutes for another particularly common type of producer cooperative, the agricultural marketing cooperative; some states have special statutes for worker cooperatives; and some states have separate statutes for consumer, as opposed to producer, cooperatives.

The partnership statutes, in contrast, are not as specialized as the corporation statutes. Each state has only one general partnership statute, and under that statute partnership shares can be given in return for any type of patronage—whether it involves the provision of inputs such as labor or capital or the purchase of the firm's products—or to persons who are not patrons at all.

Although cooperatives are sometimes loosely said to be "nonprofit," nonprofit corporations are conceptually quite distinct from cooperatives. The defining characteristic of a nonprofit organization is that the persons who control the organization—including its members, directors, and officers—are forbidden from receiving the organization's net earnings. This does not mean that a nonprofit organization is barred from earning profits; rather, it is the *distribution* of the profits to controlling persons that is forbidden. Thus by definition, a nonprofit organization cannot have owners. A well-drafted nonprofit corporation statute imposes this "nondistribution constraint" on any organization formed under the statute, and hence prohibits the formation, as a nonprofit corporation, of any form of cooperative and of any other form of owned enterprise.

What Must a Theory of Ownership Explain?

In principle, a firm could be owned by someone who is not a patron. Such a firm's capital needs would be met entirely by borrowing. Its other factors of production would likewise be purchased on the market, and its products would be sold on the market. The owner would then be a pure entrepreneur, of roughly the character described in Frank Knight's classic work,[13] simply controlling the firm and receiving its (positive or negative) residual earnings after all output was sold and inputs were paid for. Such firms are rare, however. Rather, ownership is commonly in the hands of one or another group of the firm's patrons—that is, in the hands of persons who have some other transactional relationship with the firm, either as suppliers or as customers.[14]

It follows that a general theory of enterprise ownership must explain at least two things: First, why is ownership generally given to the firm's patrons? Second, what factors determine the particular group of patrons—whether lenders of capital, suppliers of labor or other inputs, or purchasers of the firm's products or services—to whom ownership is given in any particular firm?

The remainder of this chapter sketches such a theory, and the two following chapters flesh out its details. Parts II–IV then offer illustration and further refinement of the theory through detailed application to particular industries and particular organizational types.

The Firm as a Nexus of Contracts

In developing a theory of ownership, it helps to view the firm—as economists increasingly do these days—as a nexus of contracts.[15] More precisely, a firm is in essence the common signatory of a group of contracts. Some of these contracts are with vendors of supplies or services that the firm uses as inputs, some are employment contracts with individuals who provide labor services to the firm, some are loan agreements with bondholders, banks, and other suppliers of capital, and some are contracts of sale entered into with purchasers of the

firm's products. In small firms organized as sole proprietorships, the individual proprietor signs these contracts. In a corporation or a partnership, the party that signs the contracts is a legal entity. Indeed, one of the most important functions of organizational law is to permit the creation of a juridical person—a single legal entity—that can serve as the signatory to contracts.

A firm's contracts generally commit it to certain actions, such as making payments to vendors or delivering goods or services to customers. But contracts typically also leave the firm with some discretion. An employment contract, for example, generally gives the firm some freedom to choose the particular tasks to which the employee will be assigned; a loan contract commonly gives the firm some choice concerning the uses of the borrowed funds; and a contract of sale often affords the firm some latitude in the methods to be used to produce the goods or services promised to a given customer. The right to exercise this discretion is a vital component of control over the firm, and is by definition the prerogative of the firm's owners. The firm may itself also own assets outright, of course, in which case the exercise of discretion over the use of those assets is included among the control rights belonging to the owners of the firm. Again, however, outright ownership of assets is not an essential aspect of what we call a firm.[16]

Broadly speaking, each transaction that a firm enters into is embedded in one or the other of two relationships between the firm and the patron who is the other party to the transaction. In the first of these relationships, which I shall call "market contracting," the patron deals with the firm only through contract and is not an owner. In the second, which I shall simply call "ownership," the patron is also an owner of the firm.

By terming the first of these two relationships "market contracting" I do not mean to imply that there is necessarily a competitive market for the goods or services in question. The relationship between the firm and its patron may, for example, be one of bilateral monopoly, with only one potential trading partner on each side of the transaction. Rather, I use the expression "market contracting" here simply to emphasize that the patron in question can control the firm's behavior only by seeking enforcement of his contract with the firm, or by threatening to cease transacting with the firm in favor of whatever other alternatives the market offers him. Where the relationship is one of ownership, in contrast, the patron has the additional option of seeking to control the firm's behavior directly through the firm's mechanisms for internal governance. Moreover, by using the term "market contracting" I do not mean to suggest that the relationships in question are necessarily short-term, as on a spot market; rather, I shall use the term to encompass also long-term, highly interdependent contracting of the type sometimes referred to as "relational" contracting.[17]

Using this terminology, we would then say that, in an investor-owned firm, the transactions between the firm and the patrons who supply the firm with capital occur in the context of ownership, while transactions with workers, other suppliers, and customers all take the form of market contracting. An employee-owned firm, in contrast, obtains labor inputs from workers whose relationship is one of ownership, but obtains its capital and other supplies, and sells its products, through market contracting. And a consumer cooperative, in turn, obtains capital, labor, and all other inputs through market contracting while selling the goods or services it produces in transactions embedded in ownership.

To be sure, patrons occasionally have some but not all of the prerogatives of ownership, putting their relationship with the firm somewhere ambiguously between ownership and market contracting. The relationship between a firm and its employees under German codetermination, which will be examined in Chapters 5 and 6, is a conspicuous example. In general, however, the simple dichotomy between market contracting and ownership that I have described here will be adequate for our purposes.

An Overview of the Theory

If a firm were entirely owned by persons who were not among the firm's patrons, then all the firm's transactions involving inputs and outputs would take the form of market contracting. Although feasible in principle, in practice this is likely to be quite inefficient. Market contracting can be costly, especially in the presence of one or more of those conditions loosely termed "market failure"—for example, where there is an absence of effective competition, or where one of the parties is at a substantial informational disadvantage. We shall examine the costs of market contracting more closely in Chapter 2. For the present we need simply note that, where these costs are high, they can often be reduced by having the purchaser own the seller or vice versa. When

both the purchaser and the seller are under common ownership, the incentive for one party to exploit the other by taking advantage of market imperfections is reduced or eliminated. Assigning ownership of a firm to one or another class of the firm's patrons can thus often reduce the costs of transacting with those patrons—costs that would otherwise be borne by the firm or its patrons. To assign ownership to someone who is not among the firm's patrons would waste the opportunity to use ownership to reduce these costs.

Pursuing this logic we can then ask, for any given firm: what is the lowest-cost assignment of ownership? By "lowest-cost assignment of ownership" I mean the assignment of ownership that minimizes the total costs of transactions between the firm and all of its patrons. (Alternatively, I mean the assignment of ownership that maximizes the total net benefits—benefits minus costs—of transactions between the firm and its patrons. Since a forgone benefit can be considered a cost, these definitions are equivalent.) The analysis just offered suggests that, all other things equal, costs will be minimized if ownership is assigned to the class of patrons for whom the problems of market contracting—that is, the costs of market imperfections—are most severe. For example, if the firm is a natural monopoly vis-à-vis its customers, but obtains its capital, labor, and other factors of production in reasonably competitive markets, then total costs are likely to be minimized by assigning ownership to the firm's customers. This presumably helps explain why, as discussed in Chapter 9, so many rural electric utilities are organized as consumer cooperatives.

If ownership were always perfectly effective, in the sense that it eliminated all costs of market contracting without imposing any new costs of its own, then there would be no more to a theory of ownership than this. In fact, however, ownership itself involves costs. Some of these costs are what might be called "governance" costs; they include the costs of making collective decisions among the owners, the costs of monitoring managers, and the costs of the poor decisions and excessive managerial discretion that result when collective decision making or managerial monitoring are imperfect. Another cost is the risk bearing associated with receipt of residual earnings. We shall explore these and other costs of ownership in detail in Chapter 3. For the moment we need simply note that, like the costs of market contracting, these costs can vary greatly from one class of patrons to another. Some patrons, for example, are in a much better position than others to govern the firm effectively. Similarly, some are better able than others to bear the risk associated with the right to residual earnings. Consequently, when deciding which class of patrons is to own the firm, the costs of ownership must be considered in addition to the costs of market contracting. For example, Chapter 9 offers evidence that the costs of consumer ownership in an electric utility are significantly higher in urban areas than in rural areas, and that this is an important reason why utility cooperatives are much less common in urban areas than in rural areas.

The least-cost assignment of ownership is therefore that which minimizes the sum of all of the costs of a firm's transactions. That is, it minimizes the sum of (1) the costs of market contracting for those classes of patrons that are not owners and (2) the costs of ownership for the class of patrons who own the firm.

Although this theory is simple in basic concept, it is important when applying the theory to realize that the costs of market contracting for any given class of patrons may depend on which of the other classes of patrons owns the firm.[18] This will become clearer in Chapter 3.

Survivorship

It is reasonable to expect that, over the long run, cost-minimizing forms of organization will come to dominate most industries. Two mechanisms press in this direction. The first is conscious design and imitation on the part of the entrepreneurs who organize firms: a firm's entrepreneurs, together with those persons who expect to be among the firm's patrons, have an incentive to adopt a cost-saving organizational form and share the resulting savings among themselves. The second is market selection: higher-cost forms of organization tend to be driven out of business by their lower-cost competitors. If we observe that a particular form of ownership is dominant in a given industry, this is a strong indication that the form is less costly than other forms of ownership would be in that industry.

In Parts II–IV we shall use this "survivorship test" as important evidence of the relative cost of different forms of ownership. There are, however, a number of reasons why this test might not be an entirely accurate measure of comparative organizational costs. Most obviously, public subsidies or regulation might give a special advantage to one form over another. Moreover, the diffusion of new forms through conscious imitation does not always happen quickly,[19] and for various reasons market selection can operate quite slowly as well.[20] In interpreting the pattern of ownership that appears in any given industry, we must be attentive to these considerations. In fact, we shall gain important insight into the processes of organizational evolution when we consider the temporal pattern of change in ownership forms in some of the industries examined in later chapters.

What Kinds of Costs?

Some might object that there are other values served by assignment of ownership besides cost minimization and that therefore the cost-minimizing form of ownership might not be the one that is most desirable from a social point of view, or even the one that is chosen by the parties involved. I use the term "cost" here, however, to include all interests and values that might be affected by transactions between a firm and its patrons. For example, among the costs of contracting for labor on the market might be a subjective sense of alienation or disempowerment that could be alleviated if the workers instead owned the firm. In fact, one of the fruits of this inquiry is a better understanding of the range of values, both subjective and objective, that are served by ownership, and of the relative significance of those values to persons who deal with the firm.

Thus I use the expression "cost-minimizing" here to mean "efficient" in the economist's very broad sense of that word—that is, to refer to a situation in which there is no alternative arrangement that could make any class of patrons better off, by their own subjective valuation, without making some other class worse off to a greater degree.[21]

In general, the only persons whose interests are importantly affected by the assignment of ownership in a firm are the firm's patrons. In the long run, moreover, all costs that patrons bear under any particular assignment of ownership—whether those costs are pecuniary or nonpecuniary—should be reflected in the contractual terms under which they will agree to transact with the firm. As a consequence the firms that survive in the market should not be those that simply minimize pecuniary costs, but those that are efficient in the broader sense.

To give the theory sketched here more substance, the next two chapters examine in greater detail the most important costs inherent in market contracting and ownership, respectively.

2

The Costs of Contracting

There are several types of market imperfections—most of which are familiar to students of economics—whose costs can potentially be reduced by assigning ownership to the affected patrons. We shall survey here, in very general terms, the most common of these problems in market contracting and discuss briefly their potential effect on the assignment of ownership. Since our principal object at this point is simply to develop an overview and a general catalog of the categories of costs involved, we shall not dwell here on details or refinements of theory or application.[1] Later chapters will offer more extensive illustrations and more elaborate analysis.[2]

Simple Market Power

Frequently, owing to economies of scale or other factors (such as cartelization or regulation) that limit competition, a firm has market power with respect to one or another group of its patrons. The affected patrons then have an incentive to own the firm and thereby avoid price exploitation. Firms often have a degree of monopoly power in dealing with their customers, and this is a common reason for organizing the firm as a consumer cooperative. Electric utility cooperatives are a conspicuous example. Monopsony—market power vis-à-vis the firm's suppliers rather than its customers—is sometimes also a motivation for patron ownership, as it clearly was in the early development of agricultural marketing and processing cooperatives.

More specifically, by owning a firm that has market power, custom-

ers can avoid two types of costs. The first is paying a monopoly price for the goods or services that the customers purchase from the firm. The second is underconsumption of the firm's goods or services owing to their excessively high price.

The first type of cost is likely to be by far the largest from the customers' point of view. But it is only a private cost to the customers—a matter of distribution between them and the owners of the firm—and not a social cost. If a monopolistic investor-owned firm is converted to customer ownership, any savings to its current customers from a reduction in the price they pay will be offset by an equal loss to the former owners. This type of cost consequently does not provide an incentive for customers to purchase a firm from existing investor-owners, since those owners will only be willing to sell the firm for a price that includes the present value of the future monopoly profits they will lose by virtue of the sale. This private cost can, however, provide a strong incentive for customers to establish a *new* firm on their own, or to use the threat of doing so to acquire the existing monopolist's plant at a reasonable price.

The second type of cost—the distortion in consumption resulting from a price above cost—is a true social cost. The prospect of its elimination may therefore provide an incentive even for an existing monopolist to sell his firm to his customers so he can share with them the resulting efficiency gains.

Ex Post Market Power ("Lock-In")

Problems of monopolistic exploitation can also arise after a person begins patronizing a firm even if, when the patronage began, the firm had a substantial number of competitors.[3] These problems arise where two circumstances are present. First, upon entering into the transactional relationship the patron must make substantial transaction-specific investments—that is, investments whose value cannot be fully recouped if the transactional relationship with the firm is broken. Second, the transactions are likely to extend over such a long period of time, and are sufficiently complex and unpredictable, that important aspects of future transactions cannot be reduced to contract in advance but rather must be dealt with over time according to experience. In such circumstances, the patron becomes locked in to a greater or lesser degree once she begins patronizing the firm: she loses the protective option of costless exit if the firm seeks to exploit her.

Labor contracting provides an example. At the time an individual first enters the labor force there are likely to be many firms with which she could obtain employment. As a consequence, she will be in a position to make those firms compete with one another for her services. After she has taken a job with a particular firm and worked with that firm for a number of years, however, her skills are likely to become specialized to that firm to some degree, and her flexibility for retraining may also diminish. She thus may be substantially more productive at her present firm than she would be elsewhere. Moreover, she may have made important personal investments in the community where her employer is located—investments that cannot be recouped if she leaves that community. Her spouse may be employed there, her children may be accustomed to the local school system, and her entire family may have developed strong personal ties with other members of the community. In short, with time it may become increasingly costly, both professionally and personally, for her to change employers. When this happens, her present employer is in a position to act opportunistically toward her in setting wages or other terms of employment, compensating her only well enough to prevent her from leaving and thereby, in effect, appropriating the value of the job-specific investments, both professional and personal, that she has made.

An individual who perceives the possibility of such an outcome when first seeking employment is likely to insist on higher initial wages to compensate her for the risk of subsequent exploitation, and she may refuse employment altogether with a firm that, though otherwise an attractive employer, cannot effectively bind itself not to act exploitatively in the future. Likewise, after accepting employment with a firm, she will have suboptimal incentives to make firm-specific investments, such as acquiring knowledge or skills that are valuable only to that firm or buying an expensive or idiosyncratic house that is just right for her family but might be difficult to resell if she should leave the firm and seek employment elsewhere.

LOCK-IN
?
Quasi-rent

This problem of "lock-in" can be mitigated by assigning ownership of the firm to the patrons who are potentially affected by it. This point is now familiar from studies of vertical integration, where lock-in has come to be recognized as an important incentive for merging two individual firms when one of the firms is an important customer or supplier of the other.[4] But the lock-in problem can also help explain why ownership of a firm is extended, not just to another individual enterprise with which the firm deals, but to a whole class of the firm's

patrons—which is the situation of most interest to us here.[5] In particular, lock-in apparently provides an incentive not only for worker ownership but also for various forms of consumer ownership: a conspicuous example is the common practice, discussed in Chapter 8, of making franchisees the collective owners of their franchisor.

The Risks of Long-Term Contracting

There are various common situations in which a firm and its patrons have strong incentives to enter into a long-term contract. One of these is to avoid the possibility that transaction-specific investments will expose one or both parties to opportunistic behavior by the other. Another is to allocate specific risks between the parties. And yet another is to mitigate the problems of adverse selection that are endemic to insurance and related industries.[6]

Even where long-term contracts are relatively successful in dealing with these types of problems, the contracts themselves can generate substantial risk for a firm and its patrons. As conditions change during the term of the contract, the price(s) specified in the contract can produce a substantial windfall gain for one party and a corresponding loss for the other. A long-term contract can therefore become a pure gamble between the parties, inefficiently creating large risks for both where there is little or no underlying social risk (that is, where the parties taken together face no risk, but rather are engaged in a zero-sum transaction). For example, the vagaries of inflation have this effect on all long-term contracts whose price terms are written in nominal dollars—as contracts effectively had to be written before the development of reliable price indices, and as many contracts are still written. Making the patrons the owners of the firm eliminates much of this risk: what the patrons lose as patrons they gain as owners, and vice versa. As we shall see in Chapter 14, this has historically been, and may continue to be, an important reason for the success of mutual life insurance companies.

Asymmetric Information

Contracting can also be costly when the firm has better information than its patrons concerning matters that bear importantly on transactions between them or, conversely, when the patrons have better information than does the firm.

For example, a firm often knows more than its customers about the quality of the goods or services that it sells. This is especially common when the contracted-for goods or services are complex or difficult to inspect. The firm then has an incentive to deliver a lower-quality performance than it promises. Customers, in turn, have an incentive to distrust the firm, and may offer to pay only the value of the worst possible performance or decline to purchase at all.[7] The result is an inefficient transaction: although the customers are getting just what they are paying for, and the firm is getting paid no more than is necessary to cover the cost of the quality of performance it is providing, both the customer and the firm would prefer a higher-quality performance and a higher price. Firms can sometimes manage this problem by investing in a reputation for quality, but that strategy generally takes time and can often provide at best a partial palliative.

In these circumstances, customer ownership has the virtue that it reduces the firm's incentive to exploit its informational advantage. A simple example is provided by agricultural fertilizers and livestock feed. When commercial fertilizers and feed were first introduced on the market at the beginning of the twentieth century, farmers had difficulty determining their contents. As a consequence, the quality of the products offered on the market was low. The response of many farmers, as discussed in Chapter 9, was to form supply cooperatives to manufacture and distribute the feed and fertilizer they needed. Even more conspicuous examples can be found in the service industries, including savings banking and life insurance.

It is not just in dealing with customers, however, that the firm may have an informational advantage. The same problem can arise between the firm and its suppliers or employees. An investor-owned firm may skimp on efforts to assure its workers continuity of employment or to maintain a safe workplace, and the firm's workers, in anticipation of this, may invest less in firm-specific skills or insist upon higher wages than they would otherwise. Worker ownership may promise more efficient labor relationships in this respect.

The problem can also run the other way, with the patrons possessing information about their own level of performance that is unavailable to the firm. Managers of an apartment building may not be able to police the degree of care taken by tenants in maintaining their units, and insurance companies may not be able to monitor the safety precautions taken by their insureds. (Indeed, the insurance business is the original source of the term "moral hazard" that is now commonly employed to refer to the incentive to skimp on effort that asymmetric information creates.) Similarly, workers are likely to know more than their employer concerning the amount of effort they are devoting to their job. Patrons in these situations have an incentive to behave opportunistically, and firms can be expected to adjust their prices or wages to compensate. By reducing this incentive for opportunism, patron ownership has the potential to improve the terms on which patrons can deal with the firm. Where the class of patrons is numerous, however, the incentive for individual patrons to exploit their informational advantage at the expense of others may remain strong even with patron ownership—an issue we shall examine more carefully when considering mutual companies and worker-owned firms.

Strategic Bargaining

Asymmetric information can also result in costly strategic bargaining. A firm's management commonly has information about the firm's plans and prospects that is not available to its patrons, and a firm's patrons often have information about their own preferences and opportunities that is unavailable to management. If the patrons in question do not own the firm, they may have little incentive to reveal their private information to the firm, because that would give the firm an advantage it would otherwise lack in bargaining with them. Likewise, the firm's management will often have no incentive to share its private information with the patrons. Moreover, even where the firm would gain from disclosing information to its patrons, or vice versa, credible disclosure may be impossible.

In the presence of private information of this sort, substantial time and effort can be lost in contractual negotiations. The parties have an incentive to delay reaching an agreement in order to test the other side's true willingness to compromise and to signal their own resolve. The strikes and lockouts that often accompany labor contracting provide a familiar illustration.[8] Patron ownership can reduce or eliminate this strategic behavior, because it removes the incentive for either the firm's management or its patrons to hide information from each other or to take advantage of information that the other lacks.

Communication of Patron Preferences

When patrons cannot credibly communicate their preferences to management, inefficiencies may arise beyond the costs of strategic bargaining. In particular, management may have difficulty finding the least-cost combination of contractual terms that will satisfy the firm's patrons.

Consider a firm's efforts to choose an appropriate mix of wages, fringe benefits, and workplace amenities to offer its employees. What are the workers' preferences concerning tradeoffs between financial compensation and working conditions? What balance do they prefer between current and deferred compensation, or between job security and higher wages? What is their preferred tradeoff among job safety, workplace aesthetics, speed of production, and variety of work? If management lacks this information, it may fail to find the package that offers the greatest satisfaction to the employees per dollar spent by the firm. Yet if the workers do not own the firm, they have an incentive to misrepresent their preferences on such matters for the sake of enhancing their overall bargaining position. And management, knowing that the workers have an incentive to dissemble, has reason to disbelieve the workers, whether they are in fact speaking honestly or not. Consequently, workers may fail to communicate their true preferences even though both the firm and the workers would be better off if those preferences could be credibly communicated.

Patron ownership, by removing the conflict of interest between patrons and owners, reduces these obstacles to communication.

Compromising among Diverse Patron Preferences

Often a firm must deal on the same terms with all patrons in a given class even though individuals within that class have differing preferences. The firm may be constrained to offer the same working conditions to all of its employees or the same quality of goods or services to all of its customers. In these circumstances, market contracting can lead the firm to choose an inefficient compromise among its patrons' differing preferences. This problem occurs because a firm contracting in a market has an incentive to accommodate the preferences of the marginal patron. Yet efficiency generally calls for choosing conditions that suit the preferences of the average patron, and these preferences may be quite different from those of the marginal patron.[9]

Consider a firm's choice of the appropriate level of safety for its workers. The firm has an incentive to adjust safety to respond to the tradeoff between higher wages and enhanced workplace safety that satisfies the marginal workers—that is, those workers who are indifferent between remaining with the firm at the current wage and working conditions or seeking employment elsewhere. But the preferences of the marginal worker may not be those of the average worker. For instance, the marginal worker may be a young person who will happily take large risks in return for higher wages, while the average worker is an older person with family commitments who is much more risk averse. As a result, the level of workplace safety chosen by the firm may not be that which most efficiently meets the needs of the firm's workers as a whole.

Where the patrons in question own the firm, they are likely to make decisions collectively by voting in some fashion. And voting—particularly the conventional majority rule—tends to favor the preferences of the median member of the group rather than those of the marginal member. Although the preferences of the median patron may not be those of the average patron, they will often be closer to the average than are the preferences of the patron who is marginal in the market. Patron ownership can thus offer advantages in selecting an appropriate compromise when patron preferences diverge.

Alienation

Advocates of "noncapitalist" forms of ownership—such as worker-owned firms, consumer cooperatives, and nonprofits—frequently express, explicitly or implicitly, ideological opposition to capitalist (investor-owned) enterprise. The rhetoric is often vague, simply decrying the "alienation" or "exploitation" said to characterize capitalist firms. At bottom, this opposition to investor-owned enterprise frequently seems to be rooted in concerns about market failures of the types just surveyed—for example, concerns that investor-owned firms, in dealing with their customers or workers, will take advantage of market power, lock-in, or informational asymmetries. But sometimes opposition to capitalism also seems rooted in concerns about what we might term the "transactional atmosphere" of market exchange. A clear analysis of the problem is difficult to find. But perhaps part of what is involved is an objection to the subjective experience of market contracting itself.

Market contracting is, in an important sense, an adversarial process: purchasers try to obtain the best goods or services at the lowest price possible; sellers try to provide the lowest-cost goods or services at the highest price possible. Some individuals enjoy this contest, and most participants in market economies are acculturated to engaging in it with a fair degree of indifference, at least in conventional commercial contexts. Yet some individuals evidently find it unpleasant to obtain or provide goods or services through such adversarial relationships.

One source of this unpleasantness is presumably the vigilance required to protect oneself from exploitation when transacting on the market. This vigilance could appropriately be included among the costs of market failure described earlier, since without market failure vigilance would often be unnecessary. In addition, however, some individuals may have preferences concerning the types of relationships they have with other people, preferences that go beyond the quality or price of the goods and services ultimately received through those relationships or the vigilance those relationships require. They may dislike the experience of having an adversarial relationship when they would instinctively prefer to have relationships that are more cooperative, trusting, or altruistic. For such individuals, there may be considerable value in eliminating the most tangible adversarial link in the chain of commerce by owning the firm they patronize (say, by purchasing through a consumer cooperative or selling through a producer cooperative) or by patronizing a nonprofit firm.

In assessing the relative efficiency of alternative economic arrangements, received economic theory generally ignores such preferences concerning transactional processes, as opposed to preferences concerning transactional outcomes such as price and quality of performance. It does not necessarily follow, of course, that these preferences are unimportant. And, where they *are* important, market contracting brings the cost of running counter to them.

An alternative interpretation of alienation is that individuals gain important satisfaction from having a feeling of control over an enterprise they patronize, or from participating with other patrons in its governance—a satisfaction that may be lost when they deal with the firm only through market relationships. More will be said about this in the next chapter.

Who Bears the Costs?

When contracting with a given class of patrons is costly, the patrons involved will sometimes bear those costs. For example, customers are likely to bear most of the costs of a firm's monopoly in its product market. But in many cases some other class of patrons will end up bearing the costs of contracting. If a given firm hires labor in a competitive market, then the firm's workers generally will not bear any special costs that are involved in contracting with the firm. Rather, those costs are likely to be borne by the firm's owners, customers, or suppliers of other factors of production, depending on the nature of the other markets in which the firm contracts. Regardless of who bears the costs, however, there is an incentive to reduce those costs wherever possible by reorganizing the firm with a more efficient form of ownership.

Who Owns Whom?

We have been speaking of reducing the costs of market contracting by having the patrons own the firm. In principle, those costs could also be reduced by having the firm own its patrons. Where there is only one patron involved, there is often no important distinction between these two forms of vertical integration. But where—as in the cases of principal interest here—multiple patrons are involved, there commonly is a difference. Ownership of a single firm by multiple patrons does not create the same incentives as does ownership of the patrons by the firm.

If the problem is that patrons, having information inaccessible to the firm's management, can behave opportunistically toward the firm, then this problem is not completely solved by having the patrons own the firm. There remains an incentive for each patron to act opportunistically even as an owner, since he will bear only a small fraction of the cost of his behavior, while the rest falls on the other patron-owners. Consequently, where it is the patrons rather than the firm that have the informational advantage, it is potentially more efficient for the firm to own the patrons than for the patrons to own the firm.

In some situations, however, it is infeasible for the firm to own its patrons. In particular, when the patrons are individuals such as workers or consumers, legal prohibitions on personal servitude, as well as a variety of practical contracting problems, obviously bar this arrangement. If the firm and its patrons are to be connected by ownership, the patrons must own the firm.

For related reasons, ownership of the patrons by the firm can sometimes be impractical even where the patrons are not individuals but instead are other firms. Consider the common case—discussed at length in Chapter 8—of a wholesaler owned as a cooperative by the retail stores to which it sells. The problems of market failure to which this ownership arrangement responds (typically market power on the part of the wholesaler) might alternatively be solved by having the wholesaler own the retail stores. And, of course, fully integrated chain store operations of the latter type are common. But that arrangement can create diseconomies of scale, including loss of the strong incentives for efficient operation that exist when the individual retail stores are owned separately by their local managers. Having the stores collectively own their supplier, rather than vice versa, can be the superior arrangement. In short, the costs of ownership are often asymmetric between a firm and its patrons—a point that emerges even more clearly in the next chapter.

3

The Costs of Ownership

We have observed that ownership has two essential attributes: exercise of control and receipt of residual earnings. There are costs inherent in each of these attributes. Those costs fall conveniently into three broad categories: the costs of controlling managers, the costs of collective decision making, and the costs of risk bearing. The first two categories are associated with the exercise of control. The third is associated with the receipt of residual earnings. All of these costs can vary substantially in magnitude from one class of patrons to another.

We shall survey these three types of costs here in general terms. As with the costs of market contracting surveyed in the preceding chapter, subsequent chapters will offer deeper analysis and more copious and detailed illustrations.

Costs of Controlling Managers

In large firms, and especially in firms with a populous class of owners, the owners must generally delegate substantial authority to hired managers.[1] Thus, in widely held business corporations, as in large cooperatives, most decision-making authority is delegated to the firm's board of directors, who in turn delegate most operational decisions to the firm's senior officers. This delegation brings with it the costs commonly labeled "agency costs." For our purposes, these costs can conveniently be broken down into two types: the costs of monitoring the managers and the costs of the managerial opportunism that results from the failure to monitor managers with perfect effectiveness.[2]

Monitoring

If the patron-owners of a firm are to control its management effectively, they must incur the costs of (1) informing themselves about the operations of the firm, (2) communicating among themselves for the purpose of exchanging information and making decisions, and (3) bringing their decisions to bear on the firm's management. I shall refer to these costs collectively as "monitoring costs." These costs can vary substantially among different classes of patrons. Since patrons are likely to accumulate information about the firm simply as a by-product of transacting with it, the cost of monitoring for a given class of patrons will generally be inversely proportional to the importance, frequency, and duration of the patron's transactions with the firm.[3] The costs of monitoring will also depend on the ease of organizing the patrons for collective action, which may depend in turn on factors such as the patrons' physical proximity to one another and to the firm.

For example, tenants in an apartment building generally have relatively low monitoring costs. They deal repeatedly with the building's management, often for a number of years, in transactions that involve a significant fraction of their budget. They therefore have both the opportunity and the incentive to learn a great deal about how well the building is managed. Close proximity also permits easy organization for collective action. These are important factors in the viability of tenant ownership of apartment buildings through cooperatives and condominiums, as will be discussed further in Chapter 12.

Finally, the number of patrons among whom ownership is shared affects monitoring costs. If all patrons are to participate effectively in decision making, then a large class of owners requires substantial duplication of effort in becoming informed. Moreover, the monitoring efforts of any individual owner have the properties of a public good for the owners as a group: the benefits of that monitoring are enjoyed by all other owners as well, regardless of whether they have undertaken any monitoring of their own. Consequently, as the number of owners grows, each individual owner's share of the potential gains from effective monitoring decreases, thus reducing the individual's incentive to monitor.

It follows that, where the class of owners is large, it may be prohibitively costly to induce the owners to undertake anything beyond the most cursory monitoring. In itself, this argues for the smallest group of

owners possible—preferably a single owner. The fact that, despite this, a large firm often has a very large class of owners therefore suggests that either or both of two things must be true. First, the costs of market contracting would be much higher under any alternative assignment of ownership. Second, the costs of managerial opportunism are modest even though the firm's owners cannot actively supervise the managers. We shall first explore the latter possibility. Then, at the end of the chapter, we shall return to the former.

Managerial Opportunism

To the extent that the owners of a firm fail to exercise effective control over its managers, the managers have an opportunity to malinger or engage in self-dealing transactions. Clearly this can sometimes be costly.[4] Yet the conduct of a firm's managers is conditioned by a variety of constraints and incentives beyond direct sanctions or rewards from the firm's owners. There are important limits to the costs of managerial opportunism even in firms whose nominal owners are in a poor position to do any active monitoring of the firm's management at all.

Consider first self-dealing. The transactions necessary for managers to divert to themselves a significant fraction of the residual earnings in a large firm are often difficult to conceal. Moreover, these transactions are in most cases explicitly proscribed by contract or by law, thus exposing the managers to a variety of moral, contractual, tort, and criminal sanctions that can be brought to bear without collective action on the part of the firm's owners. In particular, self-dealing managers expose themselves to shaming by fellow workers, friends, or family, to derivative suits initiated by individual shareholders or enterprising lawyers, and to civil or criminal prosecution by the state (including, conspicuously, the tax authorities).

To be sure, although legal, contractual, and moral constraints may generally suffice to keep managers from putting their hand in the till, they will not necessarily ensure that managers work hard and make effective decisions. Again, however, pride and moral suasion provide important motivation, particularly for the types of individuals who work their way to the top of a managerial hierarchy. The need for the firm to prosper if managers are to keep their jobs or, even better, to enhance them, also provides an important work incentive.[5] Moreover, it may be a mistake to exaggerate the degree of effort or ingenuity that is required of the senior managers in a typical business enterprise, and thus the potential gains from better monitoring of those managers by a firm's owners. In many firms, imitation of standard managerial practices may suffice for relatively successful performance.

In sum, the inability of a firm's nominal owners to exercise much direct control may result in only a modest amount of organizational slack, at least when compared with any realistic alternative.[6] Indeed, in the chapters that follow we shall encounter large groups of firms (including mutual life insurance companies and nonprofit hospitals) that have been successful over long periods of time in competitive environments without any effective exercise of control by owners whatever—often without even having any owners.

There is, however, one costly managerial perquisite—excessive retention of earnings—that is not easy to detect or proscribe, that is likely to bring approval rather than censure from friends and colleagues both inside and outside the firm, and that is generally encouraged rather than checked by managers' desires to retain or build their empire. Retentions benefit managers by creating a buffer against adversity and by increasing the size of the firm that the managers control. But retentions are costly to the firm's owners if the rate of return on the retentions is less than the return available on investments outside the firm or if, regardless of the rate of return the retentions bring, the funds retained can never be recovered by the current owners (as happens in some mutuals and cooperatives). This problem is most easily discerned in nonprofit[7] and mutual firms, but it is arguably the principal source of inefficiency in investor-owned firms as well.[8] And because excessive retention of earnings tends to enhance rather than decrease the survival value of a firm, those firms that are particularly subject to this tendency—as firms with diffuse ownership are—may actually be favored rather than pressured by the invisible hand of market selection.

Whatever the nature of the managerial opportunism involved, where the losses it brings are smaller than the costs of the monitoring that would be required to prevent it, it is of course efficient for the firm's owners to tolerate the opportunism. Agency costs, therefore, are the sum of the costs incurred in monitoring and the costs of managerial opportunism that result from the failure or inability to monitor with complete effectiveness.

Collective Decision Making

When many persons share ownership of a firm, there are likely to be differences of opinion concerning the firm's policies and programs. Sometimes those differences will merely reflect different judgments about the most effective means for achieving a shared goal. More serious differences arise, however, when the outcome of the decision will affect different owners differently. Broadly speaking, this could happen for either of two reasons.

First, the individuals involved may differ in the way in which they transact with the firm as patrons—that is, in the nature of the goods or services they sell to, or purchase from, the firm. To take a simple example, a decision to repair the elevators in a four-story cooperative apartment building will benefit the first-floor residents much less than those on the fourth floor. The residents, depending on where they live in the building, may therefore disagree on the desirability of paying costly overtime to get the repairs done quickly. Similarly, if a worker-owned firm must shut down one of its two plants, the workers at the two plants are likely to have very different preferences about which plant should be chosen.

Second, the owners may have differences in preferences that arise from their personal circumstances rather than from any differences in their transactions with the firm. A decision by a cooperative apartment building to accelerate repayment of the principal on the building's mortgage may affect members differently depending on their personal liquidity and tax status even if they occupy identical apartments and have identical leases. Or a decision by a worker-owned firm to shift to riskier lines of business, and thereby increase the chance that the firm will fail, is likely to be less attractive to older workers than it is to younger workers who, though doing the same job, are more easily retrainable and have fewer ties to the local community.

In order for a firm's owners to make decisions when their interests differ, they must employ some form of collective choice mechanism. The nearly universal approach is to adopt a voting scheme, with votes apportioned either by volume of patronage or on the basis of one-member-one-vote. When the interests of the individual owners are diverse, such mechanisms for collective choice engender costs. These costs, which for future reference we can label the "costs of collective decision making," are logically distinct from agency costs. They can be large even in firms, such as modest-sized partnerships, in which there are no hired managers and hence no significant agency costs. Conversely, the costs of collective decision making can be negligible in large corporations in which ownership is widely shared and hence agency costs are large, as long as the owners have highly homogeneous interests.

To make this distinction clear, we can define "agency costs" as the costs of monitoring and managerial opportunism that the firm would incur even if the interests of all owners were identical. The "costs of collective decision making" are then the additional costs that result from heterogeneity of interests among the owners. Unlike agency costs, the costs of collective decision making have been largely neglected in the literature on corporate control and the economics of organizational form.[9] Nevertheless these costs play a crucial role in determining the efficiency of alternative assignments of ownership.

The collective choice mechanisms employed within firms are essentially political mechanisms. Their costs are therefore characteristically the costs of political mechanisms in general. In recent decades, the "public choice" literature has begun to provide a more systematic understanding of these costs, which might be termed the costs of "political failure," analogous to the costs of "market failure" that affect market mechanisms. Although that literature still leaves us with a very partial understanding of these costs, some general characterizations are possible.

The costs associated with collective choice mechanisms are of two broad types. First, there are the costs resulting from inefficient decisions—that is, from decisions whose outcomes fail to maximize the aggregate welfare, or surplus, of the owners themselves as a group. Second, there are the costs of the decision-making process itself.

Costly Decisions

Inefficient decisions can arise in several ways. To begin with, as already noted, majority voting tends to select the outcome preferred by the median member of the group, while efficiency generally calls for the outcome preferred by the average member. Where the median and the average member have substantially different preferences, voting can produce seriously inefficient decisions.[10] Consider again the hypothetical four-story cooperative apartment building with a broken elevator. If the residents of the first two floors, who do not use the elevator, outnumber the residents of the top two floors who do, then the residents as a whole might vote not to pay overtime to hasten the repairs, even though the money thus saved is substantially less than the costs, both pecuniary and nonpecuniary, that the delay imposes on the residents of the upper floors.

Alternatively, control over the political process can fall into the hands of an unrepresentative minority who, intentionally or unintentionally, use that control to make decisions that inefficiently exploit the majority in favor of the minority. This is particularly likely to happen when, as is often the case, some patrons are better situated to participate effectively in collective decision making than others—perhaps because they have few other demands on their time, or have special managerial expertise, or have special access to information. For example, governance of a cooperative apartment building might be dominated by those residents of the building who are retired, even if they are in the minority, because they have more time to attend meetings. As a consequence, improvements that primarily benefit the retirees, such as elevator repairs, might be emphasized at the expense of those that do not, such as repairs to the children's playground, even if the reverse priorities would be more beneficial to the building's occupants as a whole.

Whether it is the majority that inefficiently exploits the minority or vice versa, the dominant group need not be particularly venal for the resulting costs to be substantial. It is sufficient that, as is natural, the decision makers' own interests simply have more salience for them than do the interests of others.

Costly Process

The costs of the collective choice process, in turn, may also have several sources. Even if individual owners always seek to exercise their right of control without opportunism and to reach the decisions that will be most efficient for the owners as a whole, they may need to invest considerable time and effort in obtaining knowledge about the firm and about other owners' preferences, and in attending the meetings and other activities necessary to reach and implement effective collective decisions. We also know from public choice theory that the possibility of a voting cycle[11] among alternatives increases as preferences among the electorate become more heterogeneous.[12] Such cycling may be costly if there are transaction costs involved in repeatedly altering the firm's policies. More important, the instability that underlies cycling can give extraordinary power to those in control of the voting agenda to obtain the outcomes they desire, no matter how inefficient those outcomes may be.[13] Finally, if owners seek to behave strategically, then further costs may result from efforts to hide or discover information or to make or break coalitions.

Methods exist for limiting these process costs. Delegation of authority to committees, for example, can reduce the costs of participation, inhibit cycling, and facilitate vote trading that will mitigate the median voter problem. But delegation can also produce seriously inefficient outcomes by empowering committee members to impose their own idiosyncratic preferences on the group as a whole.[14]

Resolving Conflicts

Even if the owners of a firm are heterogeneous in their interests, the costs of collective decision making may nevertheless be low if there is some simple and salient criterion for balancing those interests. Consider the division of the firm's net earnings among its owners. This is potentially controversial where the character or volume of the transactions between individual owners and the firm varies substantially. Important examples, which we shall examine closely in Chapter 6, involve employee-owned firms in which the employees differ in the types of work they do. The costs of reaching agreement on an allocation of earnings, and the possibility that the resulting allocation will create inefficient incentives, may be manageable if it is easy to account separately for the net benefits bestowed on the firm by transactions with individual owners and to apportion the firm's earnings according to that accounting. Alternatively, if the value of each individual owner's transactions with the firm is difficult to measure, a rule of equal division may serve as a focal point[15] on which agreement can easily be reached, thus minimizing the process costs of decision making though perhaps creating some inefficient incentives. Law firms often follow one or the other of these approaches: some use explicit multifactor productivity formulas to determine partners' shares; others follow a simple rule of equal division of earnings among all partners of a given age. Where such clear and conventional decision-making criteria are absent, however, workable agreement among the owners can take a long time to reach, and may in fact never be reached.[16]

Participation

In some cases, the process of collective decision making arguably yields benefits for the patrons involved and not just costs. In fact, advocates of worker ownership often suggest that participation in control of the firm through democratic processes is of value in itself, quite apart from the practical import of the substantive decisions that result,[17] and a similar argument is sometimes made on behalf of consumer cooperatives and other forms of noncapitalist enterprise.[18] Although the reasons for valuing participation in this way are seldom spelled out explicitly, at least three can be identified.

First, individuals might simply enjoy the experience of participating in collective decision making—attending meetings, debating alternatives, assuming offices—as a social activity that is satisfying in itself. That is, political activity may in effect be a consumption good. Second, as is sometimes argued in the context of worker ownership, individuals may gain psychological satisfaction from the feeling of being in control, and this feeling may be enhanced for a firm's patrons by permitting them to participate directly in the decision making of the firm.[19] Third, as has also been argued on behalf of worker ownership in particular, participation in collective decision making within the firm may be useful training for participation in the democratic political processes of the larger society, and might be valued for this reason not only by the individuals involved but also by the rest of society.[20]

But note that these benefits, real though they may be, still involve tradeoffs. To grant the franchise and the associated benefits of participation to one group of patrons typically requires denying them to all other groups of patrons. Advocates of alternative forms of ownership sometimes overlook this point. For example, it has been argued, on behalf of worker ownership, that it is inconsistent to have democracy at the level of the state and not at the level of the firm.[21] Yet in fact there is democracy in the typical investor-owned firm; it is just that the investors of capital do the voting rather than the workers. Converting to worker ownership means not only enfranchising the workers but also disenfranchising the firm's investors while continuing to deny the franchise to the firm's consumers. Consequently, the question generally is not whether there is voting in a firm, but rather who votes. If the benefits of participation as a good in itself are greater for one group of the firm's patrons than for another, then this becomes a further consideration in assigning ownership.

The value to individuals of participation as a good in itself is an empirical question that is illuminated by the analysis of existing ownership patterns in subsequent chapters. Interestingly, the evidence suggests strongly that for all classes of patrons—including, in particular, employees—the benefits of participation are generally insufficient to outweigh the costs of collective decision making.

Why Not Make Everybody an Owner?

In theory it would be possible to have all classes of patrons share in collective decision making, and thus not completely disenfranchise anyone. This is essentially the position taken by those who feel that every group affected by a business firm's decisions—its "stakeholders," such as workers, customers, suppliers, members of the local community, and environmental groups—should have representation on the firm's board of directors.[22] Moreover, one might think that this would also have the important advantage of reducing the costs of market contracting for all of the firm's patrons and not just for a single group of them.

But because the participants are likely to have radically diverging interests, making everybody an owner threatens to increase the costs of collective decision making enormously. Indeed, one of the strongest indications of the high costs of collective decision making is the nearly complete absence of large firms in which ownership is shared among two or more different types of patrons, such as customers and suppliers or investors and workers.

Risk Bearing

The preceding discussion has focused on the costs associated with the first element of ownership: the exercise of control. But there are also costs associated with the second element of ownership: the right to residual earnings. Most conspicuous among these is the cost of bearing important risks associated with the enterprise, since those risks are often reflected in the firm's residual earnings.[23] One class of a firm's patrons may be in a much better position than others to bear those

risks—for example, through diversification. Assigning ownership to that class of patrons can then bring important economies.

This is a familiar explanation for the prevalence of investor-owned firms. It is not true, however, that lenders of capital are the only low-cost risk bearers. For example, customers can also be in a good position to bear the risks of enterprise, particularly where the goods or services involved are a small fraction of the customers' budget or where the customers are themselves firms that can pass the risk on to their own owners or customers. Moreover, the existing literature often imputes to a firm's noninvestor patrons, and to employees in particular, a greater degree of risk aversion than they actually seem to exhibit. Indeed, the evidence offered here suggests that the importance of risk bearing as an explanation of ownership is commonly overstated.

Entrepreneurship

So far we have been focusing on the costs of ownership for an established firm. But there are also costs associated with organizing a firm in the first place or with changing a firm's form of ownership. We can think of these costs as the costs of entrepreneurship.

If, initially, the prospective owners of a new firm had to assemble and organize themselves on their own before establishing the firm, then it would generally be impossible for any numerous and widely dispersed class of patrons to assume ownership. But in fact the organization of a firm is generally brokered. An entrepreneur first establishes the firm by herself and then sells it to the patrons who will ultimately own it. In the process, the entrepreneur organizes the patrons into a group.

For example, widely held business corporations are typically organized first as closely held firms. Subsequently, shares are sold off to members of the investing public in a stock offering brokered by an investment banking firm. Similarly, new condominium and cooperative housing is usually built by a single developer who initially owns the entire building and then sells the separate units to individuals who ultimately become, collectively, the owners of the building. And the numerous worker-owned plywood manufacturing cooperatives in the Pacific Northwest, discussed in Chapters 5 and 6, were in many cases established by individual promoters who would form a company and then find workers to buy it.

Established firms, moreover, can often change their form of ownership relatively easily. For instance, over the past century a number of investor-owned insurance companies have converted into mutual (policyholder-owned) companies and vice versa. Since the 1970s, large numbers of apartment buildings have converted from investor ownership (that is, rental) into cooperatives or condominiums. And more recently a number of investor-owned industrial firms have been sold to their workers. Because such transactions can be brokered, the costs of the transactions are often modest relative to the value of the firm. As a consequence, the costs of changing forms of ownership need not have an important bearing on the forms that ultimately survive. Two factors can, however, make the costs of changing a serious impediment.

First, important economies derive both from the presence of established brokers who specialize in ownership transactions and from the existence of standardized procedures for handling those transactions. Where such institutions have not yet developed, the costs of adopting or converting to a particular form of ownership may be high.

Second, when a firm's owners do not effectively control the incumbent managers, the managers may seek to preserve their autonomy or their jobs, by substantially raising the costs of changing the firm's form of ownership. The managers are particularly likely to be successful in this regard where, as in many cooperative and mutual firms, shares in ownership are not freely marketable.

Both of these factors produce inertia in the selection of organizational forms. This inertia is more pronounced for some forms of ownership than others. As we shall see, there are industries in which anachronistic forms of ownership have remained firmly embedded long after they have lost their original efficiency advantage over other forms.

Applying the Calculus

Although the particular categories of costs described here do not exhaust all the efficiency considerations relevant to ownership, they usefully organize those that appear most important. Ignored here are some other considerations, such as the "horizon problem," the problem of "perverse supply response," and the tendency of cooperatives to "degenerate" into investor-owned firms, that have sometimes been emphasized in the literature but that do not seem to play a fundamental role in determining patterns of ownership. These latter considerations

will be discussed later in the context of particular industries that illustrate the issues involved.[24]

The chapters that follow show how tradeoffs among the various costs described here determine the structure of ownership in particular industries. In anticipation of those analyses, some general comments about these tradeoffs are in order.

As noted in Chapter 1, the efficient assignment of ownership minimizes the sum, over all the patrons of the firm, of the costs of market contracting and the costs of ownership. If the class of patrons for whom the costs of market contracting are highest is also the class for whom the costs of ownership are lowest, then those patrons are unambiguously the most efficient owners. This is often the case for small businesses.

Farms in the staple grain crops, such as wheat and corn, are obvious examples. It is not costly to borrow most of a farm's capital on the market, because the land, equipment, and crops can be pledged as security. Nor is it costly to sell the farm's products on the market, since they are simple, standardized, and easily evaluated by their purchasers (and since, to the extent that the purchasers have market power, this can be dealt with by farm-owned marketing cooperatives). Most farm inputs are also sufficiently simple and standardized to permit their purchase on the market with little cost, and farm-owned supply cooperatives provide a good solution where this is not the case. In contrast, hiring all of the labor for the farm on the market would generally lead to serious inefficiency owing to the difficulty of monitoring farm work—essentially a problem of asymmetric information—and this problem cannot be solved by having the farm own its workers. These costs of labor contracting can, however, largely be avoided by giving ownership of the farm to the family that provides most of the farm's labor. As for the costs of ownership, two of the three principal categories of those costs—the costs of monitoring managers and the costs of collective decision making—are obviously low for family farms. The chief cost of family ownership is risk bearing, and this can be mitigated by passing risk on to the market (via futures contracts), to insurers (via crop insurance), to the government (via price supports), and to creditors (via default).

Yet frequently—and especially in large-scale enterprise where the relevant classes of patrons are sizable—the efficient assignment of ownership is not so obvious. One reason is that, when the costs of market contracting are high for a given class of patrons, the costs of ownership are often high too, and for much the same reason: because it is costly for the patrons in question to become informed about how well the firm is serving them. Life insurance policyholders in the early nineteenth century provide an example we shall return to. Contracts alone were insufficient to assure the policyholders that their insurance company would ultimately pay off on their policy, yet the policyholders were too numerous and dispersed to exercise meaningful control over their insurance company if they owned it collectively.

Such patrons are often efficient owners, despite their high costs of ownership. Even if they cannot monitor the firm's management effectively, and thus cannot exercise much control over the firm beyond that available simply through market transactions with the firm, it does not follow that there is no substantial gain from having those patrons own the firm. To use Albert Hirschman's felicitous terminology,[25] it can be efficient to assign ownership to a given class of patrons even if, for those patrons, voice adds little to exit in controlling the firm. An important reason for this is that, by virtue of their ownership, the patrons are assured that there is no other group of owners to whom management is responsive. It is one thing to transact with a firm whose managers are nominally your agents but are not much subject to your control; it is another to transact with a firm whose managers are actively serving owners who have an interest clearly adverse to yours.[26]

In short, the costs of contracting for a class of patrons may be substantially reduced by making those patrons the owners even if they will only be very passive owners. Thus life insurance companies in the early nineteenth century were typically owned by their policyholders. Large U.S. industrial corporations in the twentieth century are arguably another example, as will shortly be discussed.

In the extreme, when both the costs of market contracting and the costs of ownership are exceptionally high for a given class of patrons, the efficient solution is sometimes to assign ownership to none of the firm's patrons but instead to form an unowned, or nonprofit, firm. Making owners of anyone other than those high-cost patrons would inefficiently threaten those patrons' interests. Yet making those patrons owners would result in no meaningful reduction in the agency costs of delegated management, while leading to useless administrative burdens (such as keeping track of and communicating with the nominal owners) and running the risk that the members of some subgroup

will succeed in using their authority as owners to disadvantage fellow patron-owners who are less well positioned.

In any event, as we shall see in Chapters 13–15, the distinction between nonprofit firms and firms owned by patrons who are very poor monitors is often negligible. Indeed, the tenuous character of that distinction is an important theme even in the following chapter on investor ownership.

7

Agricultural and Other Producer Cooperatives

There are three common types of producer-owned enterprise: investor-owned, worker-owned, and farmer-owned. In this chapter we turn to the last of these three, farmer-owned cooperatives that process and market agricultural products. At the end of the chapter we shall also examine other types of producer cooperatives and ask why they are so rare—that is, why there are only three principal forms of producer-owned enterprise.

Farm Marketing Cooperatives

Farmer-owned cooperatives are enormously important in marketing agricultural products. In the United States, as of 1991, there were 2,400 cooperatives primarily engaged in marketing farm products for their members, with an aggregate annual business volume of $56 billion and a total membership of 1,840,000 farmers.[1] These cooperatives marketed 28 percent of all farm products, and their market share reached as high as 81 percent for dairy products, 38 percent for grain and oilseeds, and 36 percent for cotton.[2] The share of the overall market for agricultural products accounted for by the cooperatives has increased substantially over the course of the twentieth century, advancing from 6 percent in 1913 to 15 percent in 1929 and 20 percent in 1950, and achieving a peak of 30 percent in 1982.[3]

Farm marketing cooperatives differ markedly in the scope of their activities. Some are simply bargaining cooperatives that negotiate on behalf of their farmer-members with purchasers of agricultural com-

modities. These bargaining cooperatives often do not take possession of their members' produce. They simply negotiate a common price for the commodity, leaving purchasers to deal directly with individual farmers to arrange delivery at that price. In the United States, bargaining cooperatives are particularly prominent among producers of milk for fluid consumption and, in the Pacific coast states, among growers of tree fruits and tomatoes and producers of raisins.[4]

Much more numerous and more important than the pure bargaining cooperatives are the cooperatives that actually handle their members' crops. Often the amount of processing done by the cooperative is relatively modest. For example, farmers in a locality who produce a given type of grain—particularly wheat, corn, or soybeans—will often own a local cooperative grain warehouse or elevator company that dries, sorts, and stores their grain prior to sale. The cooperative may simply hold the grain on behalf of its members, selling it on the member's order and charging for its services, or it may purchase the grain from the member and then resell it. These local grain cooperatives are often federated into regional cooperatives that operate large-scale elevator facilities for aggregating grain in greater bulk.[5]

There are also many farmer cooperatives that, like the cheese factory described in Chapter 1, not only take possession of their members' commodities but process them into finished products and even, in many cases, market those products to consumers. The brand names used by some of these cooperatives are quite familiar to American consumers. They include, for example, Sunkist (California orange growers), Sun Maid (California raisin producers), Land O'Lakes (midwestern dairy farmers), Ocean Spray (New England, midwestern, and Pacific Northwest cranberry growers), Welch's (nationwide Concord and Niagara grape growers), Diamond (California walnut growers), and Gold Kist (southern poultry producers). Many of these firms are impressively large. As of 1992, Land O'Lakes, Gold Kist, and Ocean Spray were among the leading fifty firms in the prepared food industry[6] and were also on *Fortune* magazine's list of the five hundred largest U.S. industrial corporations.[7]

The processing cooperatives are sometimes vertically integrated far downstream into manufacturing, marketing, and distribution, and some are highly innovative. Ocean Spray, for example, has developed a succession of new fruit products based both on cranberries and on other fruits, and has also been a leader in packaging.[8]

Just as the market share of the cooperatives has been steadily growing, so has the relative size of many of the individual firms. In 1962, for example, there were only five agricultural cooperatives among the Fortune 500 largest industrial firms;[9] thirty years later, in 1992, there were fourteen.[10] The cooperatives' degree of vertical integration also appears to have increased steadily over time. The regional grain cooperatives, for example, developed substantial grain export facilities that permitted them to increase their share of total grain exports—previously dominated by several large investor-owned firms—from roughly 5 percent in 1965 to 15 percent in 1985.[11]

Farm marketing cooperatives play a similarly large role in other developed market economies. By the early 1970s, for example, cooperatives accounted for 45 percent of the agricultural market in France, 48 percent in Germany, 60 percent in the Netherlands, over 70 percent in Denmark, and 80 percent in Sweden—in each case a substantial increase from just a decade earlier. Moreover, among these and other European Community countries the areas of concentration roughly parallel those in the United States, with cooperatives having especially large market shares in dairy products and grains and somewhat smaller, though still important, shares in meat and vegetables.[12] In less-developed countries, it appears that agricultural producer cooperatives generally play a distinctly smaller but rapidly expanding role.[13]

There is thus nothing quaint, old-fashioned, or local about agricultural producer cooperatives. They find their most extensive development in those economies that have the most sophisticated and competitive agricultural sectors, and the cooperatives themselves are often large, complex, and dynamic firms. As a consequence, they offer a useful application and test of our theories of ownership.

Costs of Market Contracting

Monopsony

Farming, with its highly homogeneous commodities and numerous producers, is one of the most competitive of all industries. In contrast, the middlemen—handlers and processors—who purchase farm products are often highly concentrated and hence have the potential for exercising a degree of monopsony power over the farmers they deal with.

This monopsony power can sometimes be accentuated by the seasonality or perishability of agricultural commodities. An individual farmer who simply harvests his crop and then takes it to market risks encountering prospective purchasers who offer only a very low price—perhaps below the cost of production—in the realization that the farmer has very little time in which to market his crop and therefore cannot credibly threaten to hold out for long or to engage in an extensive search for other purchasers. A purchaser, in contrast, can often realistically threaten to turn to other farmers to satisfy his needs.

The result is to give farmers an incentive to form cooperatives through which they can bargain collectively with middlemen, or with which they can displace the middlemen entirely. That incentive has apparently played an important role in the formation of farm marketing cooperatives.[14]

Cooperatively owned grain elevators, which were among the earliest forms of farmer cooperatives to be widely successful in the United States, provide a conspicuous example. Economies of scale are such that generally only one or two elevators are needed to collect, store, and transfer to a railroad all the grain produced by farmers within a given locality. In the 1890s, the elevators were nearly all operated by proprietary firms, each of which commonly owned many—sometimes hundreds—of elevators. In the major grain-producing states these firms succeeded in forming highly effective cartels, through which they collectively set the price they would pay farmers for grain. In direct response, farmers established their own local grain elevators organized as cooperatives. After a period of overt economic warfare that lasted roughly through the first decade of the twentieth century, cooperatives were established over a large fraction of the market and broke the cartels. The result was a substantial increase—perhaps between 6 and 12 percent—in the price farmers received for their grain, and a correspondingly larger percentage increase in the price of farmland.[15]

There is good reason to believe that the elevator cooperatives would not have become widespread without the stimulus of monopsony. There had been many efforts to establish cooperative grain elevators prior to the 1890s. These cooperatives typically failed after a few years, apparently because local markets for grain were then competitive. It was only after the cartels succeeded in suppressing effective competition[16] that viable cooperatives were formed by the farmers—the same farmers who had failed in forming cooperatives twenty years earlier.[17]

Outside of the staple grains, marketing cooperatives in the United

States seldom seem to have formed in response to explicit cartels. They do, however, appear to be particularly prevalent where the business undertaken by the cooperative has some degree of natural monopsony power. For example, high transportation costs combined with economies of scale have resulted in high local concentration among the processors of dairy products, which helps explain why dairy processing, like the grain elevator business, is an area in which cooperatives are particularly common.[18]

Monopsony is evidently also an important reason why proprietary processing firms tend to convert to farmer cooperatives in declining industries. For example, in the California fruit and vegetable canning industry, which has been declining since the 1950s owing to better distribution of both fresh and frozen foods, a number of failing proprietary firms have been reorganized as farmer cooperatives.[19] An important incentive for such transactions, presumably, is that once the industry has declined to the point at which local farmers have only a single cannery as a likely purchaser for their produce, they face potential price exploitation. And this possibility is aggravated by the fact that growers often have substantial crop-specific investments in their farms (fruit orchards being the most obvious example) and in their human capital, the value of which is available for expropriation by a monopsonist. The farmers are in a situation similar to that of workers in a declining firm in a declining industry.

The increasing degree of concentration in the canning industry, however, seems to be an exception to the overall trend in agriculture. In general, although markets for farm products remain fairly concentrated, the market power exercised by middlemen appears to have declined over the past hundred years. Explicit cartels among purchasers of agricultural commodities, such as those that prompted the formation of the grain elevator cooperatives at the end of the nineteenth century, have long since disappeared and would be unlikely to arise again under modern antitrust policy. At the same time, the development of futures markets for many agricultural commodities over the course of the twentieth century has reduced the strategic disadvantage that farmers face in dealing with middlemen. With a futures market, a farmer can sell his crop at his leisure long before it is harvested, or even before it is planted.

Nevertheless, as already noted, farm marketing cooperatives have not only continued to thrive but have significantly expanded their market share over the course of the century. Evidently there have also been other factors that have encouraged the success of agricultural cooperatives.

Cartelization

When farmers form a cooperative to displace a monopsonistic purchaser of farm products—that is, to actually own and operate a middleman processing or handling operation that would otherwise face the farmers as a monopsonist—the result promises to be an unambiguous improvement in social welfare, making farmers better off without making consumers worse off.[20] When, alternatively, farmers form a cooperative not to displace a monopsonistic purchaser but rather just to serve as a vehicle through which to negotiate collectively with the monopsonist, offsetting his market power with monopoly power of their own, the consequences for social welfare are more ambiguous. Although it has been argued that the exercise of such "countervailing power" is an important public policy justification for encouraging the formation of farm marketing cooperatives,[21] the issue is debatable. Undoubtedly farmers themselves will be better off if they can form an effective cartel with which to confront a monopsonistic purchaser. And, under some market conditions, consumers will benefit too. But it is also quite possible that consumers will be worse off as a result of the farmers' collective action—that the effect on consumers of putting another layer of market power in the chain of distribution will be cumulative rather than countervailing.[22]

In any event, if a farm marketing cooperative is to exercise countervailing power it must be able to function effectively as a farmers' cartel. That is, it must be able to control the aggregate supply, and hence the price, of the farmers' products. (In contrast, if the objective of the cooperative is not to bargain with a monopsonist but to displace it, as in the case of the grain elevators, then it is not necessary that the cooperative be able to function as an effective cartel.) And indeed, whether for good reasons or bad, farm marketing cooperatives in the United States have been permitted to exercise this power by the Capper-Volstead Act of 1922, which gives the marketing cooperatives a partial exemption from the antitrust laws.

On its face, the Capper-Volstead Act simply provides that setting prices collectively through a farmer cooperative is not an antitrust violation per se, and thus arguably leaves cooperatives exposed to the threat of prosecution if they should seek to exercise monopoly power. But the exemption has been given a broad interpretation. Farmers have generally been allowed to form both bargaining and processing cooperatives freely, and to use those cooperatives as means to set common prices for their products, so long as the cooperatives do not use "predatory tactics" (such as selective boycotts) to compel either farmers or purchasers to deal with them, and so long as they do not enter into anticompetitive agreements with other organizations that are not cooperatives. The formation of cooperatives, and mergers among existing cooperatives, has been freely permitted.[23] Even agreements among separate cooperatives to fix prices have been upheld, on the theory that they were doing nothing more than would be permissible if the cooperatives involved were to merge into a single organization.[24]

This long-standing antitrust exemption raises the prospect that the marketing cooperatives may have been used to establish market power, not just to counter monopsony, but further to extract monopoly profits for the farmers themselves from ultimate consumers. We must consider, therefore, to what extent farm marketing cooperatives are just cartels, formed not because they are more efficient than investor-owned enterprise but because they provide a means of fixing prices.

There are, in fact, some industries in which farmers have succeeded in using marketing cooperatives as mechanisms for cartelization. Milk is an example. Through an elaborate system of federal and state regulation that has been in place since the 1930s, legally mandated minimum prices for Grade A fluid milk have been established and enforced in most parts of the United States. These prices are well above the prices that would prevail in a competitive market, and they result in a substantial shift of wealth from consumers to dairy farmers.[25] Nevertheless, milk marketing cooperatives have regularly succeeded in raising prices even further, above the legally mandated minimum prices, throughout much of the country.[26]

The success of the milk cooperatives in fixing prices, however, is heavily dependent on the milk regulatory regime, which—among other things—places severe restrictions on the ability to take milk produced in one part of the country and sell it in another, higher-priced market.[27] Producers of most other agricultural commodities do not have the benefit of such an extensive regulatory regime. And it appears that, as a consequence, cooperatives in other areas generally have not been markedly successful in functioning as cartels.

This is not for lack of trying. Raising prices by restricting the amount produced or marketed has been an explicit objective of many farmer cooperatives handling various agricultural commodities, particularly in the 1920s and 1930s.[28] But most crops are produced by a large number of farmers, each of whom can vary his individual production substantially. Moreover, new entry into production of most agricultural commodities is relatively easy—most obviously, by farmers who had previously been growing other crops. This makes it very difficult for a cooperative to control aggregate production, and hence to exercise monopoly power.[29] If a cooperative succeeds in raising prices above cost, it creates a strong incentive for expanded production that threatens to drive prices back down. This was what happened to the cooperatives that tried to act as cartels in the 1920s and 1930s. They sought to raise prices to monopolistic levels by withholding product from the market. But the resulting surplus production hung over the market and kept prices low, often leaving the members of the cooperatives even worse off than if they had behaved competitively.

Strong evidence that marketing cooperatives generally do not succeed in establishing monopolistic prices comes from their membership policies. Some cooperatives have closed memberships (that is, additional farmers can join the cooperative only with the explicit agreement of the existing members). But the great majority have open membership policies under which any farmer who produces the crop in question is free to join and market his crop through the cooperative. Either policy makes it difficult to control the amount of crop marketed. With closed membership, excluded farmers have a strong incentive to expand production freely to take advantage of any increase in price the cooperative succeeds in arranging. With open membership, higher prices will encourage an expansion of membership and hence of product to dispose of. The evidence suggests that market power is generally sustainable, if at all, only with closed membership. Consequently, the fact that most marketing cooperatives have open membership is substantial evidence that they are unable to control prices. Indeed, a careful 1964 study could locate only four marketing cooperatives that appeared to exercise any substantial market power.[30]

The preceding observations concern cooperatives that engage in processing. One might think that pure bargaining cooperatives would provide stronger evidence of market power, since they would seem to exist for little other reason. And indeed, some of the more successful bargaining cooperatives represent a very large portion of the market. Yet there is reason to believe that they exercise only a modest degree of market power. For example, the California tomato bargaining cooperative has a very large share of the nation's total crop. Yet it is not clear that the organization has much market power. Entry into tomato growing is easy, and contracts with the cooperative bind the growers only for two years. If there is any market power, it probably derives from California legislation that imposes collective bargaining on the industry.[31] Overall, there is only modest evidence of monopoly power among the various California bargaining cooperatives.[32]

Further structural evidence of low market power comes from the relatively short length of the membership contracts in most marketing cooperatives. Cooperatives commonly employ contracts that bind their members to market their produce through the cooperative. These contracts are enforceable, and typically provide for liquidated damages sufficiently high to discourage breach. The nut growers' cooperative (Diamond), which is one of the few marketing cooperatives that apparently have substantial market power,[33] has contracts of this sort that bind its members to the cooperative for a period of five years. But contracts of this duration are rare. Most marketing cooperatives, including bargaining cooperatives, employ contracts of only one year's duration.[34] Thus farmers can decide annually whether to market their crops through the cooperative, leaving the cooperative with little control over long-run supply.[35]

Ocean Spray is an interesting example in this respect. Although it has about 85 percent of the American cranberry crop, its profitability evidently comes from marketing, not monopoly. For years it was in a position of chronic oversupply. It ultimately succeeded in rescuing its members from this condition, not by cutting back on production, but by developing and marketing new cranberry products.[36]

The preceding evidence is drawn entirely from experience in the United States. But there is good reason to believe that similar conclusions apply in other countries. In Britain, for example, concentration is lower among agricultural marketing cooperatives than among agricultural supply cooperatives, suggesting little effort at monopolization by the former. Also, levels of concentration among marketing cooperatives in Britain are low in comparison with those of the processors to whom the farm products are sold.[37]

The evidence indicates overwhelmingly that cooperatives are not simply a creature of antitrust exemption, and that they would continue to exist in large numbers even if they were effectively barred from raising prices above competitive levels.

Costly Information

Asymmetric information about crop attributes and prices has sometimes served as a stimulus to the formation of farmer marketing cooperatives. Again grain elevators and warehouses in the late nineteenth century provide an example. Proprietary operators, who understood the grading methods employed in the terminal markets better than did local farmers, would assign grain they purchased from a farmer an inappropriately low grade (for example, classifying it as Number 3 Northern Wheat rather than as Number 2), paying the farmer only the price appropriate for that grade and then reselling it at the price prevailing for the higher grade. Or, similarly, when receiving grain from a farmer for storage they would grade it too low and then substitute for it other grain that they owned that was actually of the lower grade.[38]

More generally, farm marketing cooperatives economize on a variety of information costs for their farmer-members. If each farmer in a given locality were to decide separately when and at what price to market his crops, there would be substantial duplication of effort in gathering information about market conditions, prospective purchasers, transportation, and other matters. Cooperatives allow farmers to share these costs.[39]

Risk Bearing

Farming is a risky business. Markets for most crops show large year-to-year fluctuations, and this is accentuated by the large amount of leverage farmers generally undertake in order to meet their substantial needs for capital. It is sometimes said that an important role for cooperatives is to help farmers to deal with this risk.[40] And cooperatives might indeed play such a role if they were organized to pool the returns from different crops. But in fact cooperatives are generally organized to handle only a single crop. And in those cooperatives that handle more than one crop, the returns from the different crops are typically kept separate. Thus there is no risk diversification, and the typical marketing cooperative does not reduce the amount of risk borne by its member farmers. Indeed, as noted further below in discussing the costs of capital, membership in a cooperative may substantially increase a farmer's exposure to risk.

Marketing Externalities

If there are barriers to entry into agricultural production, but processing is relatively competitive, then there may be opportunities for promoting the commodity through advertising that are available to a cooperative but not to an investor-owned intermediary. This may help explain the success of the fruit and vegetable cooperatives. Entry into (and exit from) production for many fruits, and perhaps some vegetables, is relatively inelastic in the short run because the trees take time to mature and represent a substantial crop-specific investment with a long expected life. The Sunkist orange growers' cooperative, which successfully promoted fresh orange consumption nationwide early in the twentieth century, offers an example.[41]

Tax and Credit Subsidies

In addition to the preceding more or less natural advantages that marketing cooperatives have offered farmers in reducing the costs incurred (or raising the prices received) from contracting, there have been important tax and credit subsidies offered to farm marketing cooperatives. This naturally raises the suspicion that many or most marketing cooperatives may be solely a response to these subsidies, and would not exist in their absence.

Tax Preferences

Under the United States federal corporate income tax, farm marketing cooperatives have the benefit of two favorable regimes that are not available to their investor-owned competitors. First, nearly all farm marketing cooperatives can qualify for the special rules for taxing cooperatives that are contained in Subchapter T of the Internal Revenue Code. Second, as long as they meet some slightly more stringent requirements, farm marketing cooperatives can also qualify for special tax "exemption" under Section 521.

In essence, Subchapter T permits a cooperative to escape the double taxation that is imposed on business corporations. The special privileges of Subchapter T are not confined to farm marketing cooperatives. Rather, they are available to any firm organized as a producer or consumer cooperative, with the exception of lenders' cooperatives (that is, ordinary business corporations). For example, as noted in Chapter 5, Subchapter T is also available to worker cooperatives. Because it has such general importance, it is worthwhile examining briefly how Subchapter T works.

Under Subchapter T, earnings that a cooperative pays out in cash as patronage dividends in the year they are earned are not subject to corporate taxation at all; rather, they are taxable only to the member who receives them, at her personal tax rate. Earnings that are retained rather than paid out can be treated in either of two ways, as the cooperative and its members choose. The first alternative is for the cooperative to pay tax on those earnings at the corporate tax rate. Then, if the earnings are paid out in cash as patronage dividends in a subsequent year, the corporation can deduct them for tax purposes (effectively getting a rebate of its earlier tax payment) and the earnings will be taxed to the members who receive them at their personal tax rate. The second alternative is for the cooperative's members to include their pro rata share of the retained earnings in their personal taxable income in the year they were earned, paying tax on them at their personal rate just as if they had received them as a cash dividend. If, in a later year, the earnings are then distributed as cash patronage dividends, the members receive them free of tax.

Subchapter T thus provides that a cooperative's net earnings are subject to tax only once, rather than being subject to the double taxation imposed upon business corporations. And as long as those earnings are retained rather than distributed, the cooperative can effectively choose whether that tax will be paid at the corporate tax rate or at the personal rates applicable to the cooperative's members.

More precisely, this is true of earnings to be paid out as patronage refunds and not as stock dividends. A cooperative can issue nonvoting capital stock and still qualify for Subchapter T treatment as long as dividends on the stock are limited to a rate of 8 percent. But even under Subchapter T, dividends paid on such stock remain subject to the dual-level system of taxation applied to earnings in business corporations, under which earnings are taxed both at the corporate rate when earned and again at the shareholder's personal tax rate when actually paid out.

Under Subchapter T, a cooperative need never be taxed more heavily than a comparable business corporation and may well be taxed much less. This is not to say that Subchapter T is either exceptional or unprincipled. The tax regime it establishes is roughly the same as that applied to sole proprietorships, to partnerships, and to the small business corporations that fall within Subchapter S. From the standpoint of economic efficiency, moreover, that regime is substantially more rational than the standard corporate tax regime. In fact, the major inconsistency of Subchapter T is simply that one particular type of cooperative is arbitrarily excluded from it—namely, the lenders' cooperative. Consequently, Subchapter T does not subsidize cooperatives in a general sense but only relative to investor-owned corporations that are subject to the corporate income tax.

In addition to being eligible, like other cooperatives, for the general benefits of Subchapter T, farm marketing cooperatives have the special opportunity of qualifying for status as an "exempt" cooperative under Section 521 of the federal tax code—an opportunity they share only with farm supply (purchasing) cooperatives, which will be examined in Chapter 8. Cooperatives qualifying under Section 521 have all the benefits of Subchapter T. In addition, they are exempt from corporate level taxes on any stock dividends they pay and they are also exempt from corporate taxation on income they derive from business they do with nonfarmers—income that is taxed to other Subchapter T cooperatives just as if they were ordinary business corporations.

But this additional "exemption" that Section 521 offers over the ordinary Subchapter T tax treatment of cooperatives is often marginal. As we shall see, capital stock in farm cooperatives, if present at all, is generally held by the farmer-members of the cooperative in amounts roughly proportional to their levels of patronage. As a result, even a nonexempt cooperative can avoid all corporate level tax on its patronage earnings simply by paying no dividends on its capital stock and instead paying out larger patronage refunds. Because the money distributed will go to the same individuals in any case, there is no particular disincentive to do this. And in fact this is what most farm cooperatives do. Indeed, to qualify for Section 521 status, a cooperative cannot derive more than 15 percent of its income from nonfarm business. Section 521's exemption for nonfarm income is therefore not a major benefit either.

Indeed, a cooperative that pays no stock dividends and has no nonfarm business would not be taxed any differently whether it qualified

for Section 521 or not. And in fact, because the benefits of Section 521 are so modest and its restrictions can be confining, many farm cooperatives do not seek to take advantage of it.[42]

In short, farm marketing cooperatives get roughly the same tax benefits that are available to producer or consumer cooperatives in any other industry. Although those tax benefits may have led to a larger market share for farmer cooperatives than they would otherwise have had, they cannot explain why it is that producer cooperatives are so much more common in agriculture than in other industries.

Credit Subsidies

Beyond tax preferences, the federal government has aided farm marketing cooperatives with credit subsidies. These subsidies began as early as 1916 but achieved more substantial scope with the formation of a system of federally sponsored Banks for Cooperatives in 1933—a system that continues today. For many years these banks had the benefit of capital invested by the federal government without interest and also had the authority to issue tax-free bonds. Prior to 1944 they received some direct interest subsidies as well. By 1968, however, all subsidies to the Banks for Cooperatives had been eliminated.[43] As a result, although the Banks for Cooperatives remain an important source of capital for cooperatives, they are not the exclusive source,[44] and in fact it appears that the terms on which they have offered loans to cooperatives since the late 1960s have not been noticeably different from those offered by commercial banks.[45]

Have the Subsidies Been Important?

How important have these tax and credit subsidies been, overall, in promoting the cooperative form? Some authors have argued that the tax preferences, which provide the only continuing subsidy of importance, are a significant inducement to the adoption of the cooperative form, and that without these subsidies cooperatives would have trouble competing with investor-owned firms.[46] The existing empirical evidence does not permit strong conclusions.[47] Clearly the tax system gives cooperatives an advantage over their investor-owned counterparts at the margin,[48] and presumably the cooperatives' market share is larger as a consequence.

Yet there is good reason to believe that cooperatives would have assumed an important role in the marketing of agricultural commodities in the United States even in the absence of the tax and credit subsidies. Perhaps the best evidence is that cooperatives were well established before any of these subsidies were enacted. For example, both grain cooperatives and dairy cooperatives were already widespread by the time the federal corporate income tax was adopted in 1912 and the first elements of the federal farm credit system were established in 1916. In particular, of the 2,614 grain cooperatives existing in 1936, about 60 percent had been established before World War I.[49] Of the California citrus crop, over half was already being marketed by cooperatives as of 1906.[50]

Costs of Ownership

The preceding discussion suggests that, while market contracting for agricultural products has some costs that offer an incentive for farmer ownership, those costs are not conspicuously high. Moreover, neither antitrust exemption nor tax and credit preferences seem able to account for the unusually large role that cooperatives play in this sector. Apparently much of the explanation is to be found in unusually low costs of ownership.

Monitoring

The farmer-members of agricultural marketing cooperatives are in an unusually good position to exercise effective control over the firm. The result is that agency costs are, from all the evidence available, unusually small in these organizations.

Farmers have both the incentive and the opportunity to monitor marketing cooperatives actively and intelligently. The crops that the cooperatives market represent a major, and often the only, source of income for the farmer. Farmers commonly produce the same crop, and deal with the same cooperative, for many years and sometimes for generations. Farmers of a given crop tend to be geographically concentrated, making participation in governance relatively easy. And where a cooperative covers a large region, it is both possible and a common practice to structure the cooperative in ways that continue to permit active and informed member control. For example, many large cooperatives in the United States, including those that handle basic grains such as wheat, have a federated structure in which a number of small and highly responsive local cooperatives serve as members of regional or national cooperatives. Similarly, in many cooperatives directors are elected by district rather than at large.

The high degree of control that members are able to exercise over farm marketing cooperatives is reflected in the composition of their boards of directors. The elected members of the boards in these cooperatives, in contrast to a typical large business corporation, do not include the firm's managers but rather consist exclusively of members who are active producers. The elected directors may in turn appoint a few other individuals to seats on the board. These appointed directors may include the cooperative's chief executive officer. That is not common, however, and in any case the CEO does not chair the board. More commonly included among the appointed directors are individuals, such as academics or persons prominent in public affairs, who can serve as "public" directors. Typically the cooperative's management plays no role in the nomination of directors, and sometimes even the board itself does not participate in nominations.[51]

As these board structures suggest, the farmer-members of the marketing cooperatives are commonly well informed about the cooperative's affairs and take an active interest in them. Members usually know one or more directors personally. The directors play an important role not only in conveying the members' views to management but also in conveying information from management to the members. Managers pass important or potentially controversial issues to the board for decision. Boards scrutinize managerial performance closely and not uncommonly replace managers who are not performing well. In this and other ways, management in the cooperatives is highly responsive to members' interests.[52]

This is not to suggest that management of the cooperatives is amateurish or parochial. The larger and more extensively integrated cooperatives, such as Ocean Spray, hire professional managers and give them substantial discretion in running the business.[53]

There is good reason to believe that the resulting low agency costs play a significant role in the success of the cooperatives vis-à-vis investor-owned firms. Important evidence of this is the fact that marketing cooperatives are most common among farmers who produce only one or a very few commodities,[54] and who therefore have the focused incentive and knowledge to exercise their voice in the cooperative effectively. The geographical distribution of the cooperatives also supports this conclusion. The market share of the dairy cooperatives, for example, is highest in those regions in which dairy farming is most heavily concentrated.[55] This suggests that the effectiveness of farmer monitoring, which is presumably greater when the members of the cooperative live in close proximity to one another, is more important in making the cooperative form viable than is the monopsony power of the milk purchasers, which is presumably greatest when dairy farmers are least concentrated geographically. In similar fashion, the grain marketing cooperatives are strongest in those areas devoted to one or two field crops[56] and the fruit and nut marketing cooperatives span only a single region confined to one, two, or three states.[57]

Of course, farmers located in close proximity to one another are likely to have more interests in common than those located in different regions. The tendency for the farmer-members of a cooperative to be geographically concentrated may thus also reflect another important element of governance costs—the homogeneity of interest among the cooperative's members—to which we now turn.

Collective Decision Making

A critical advantage for farm marketing cooperatives, it appears, is the extreme homogeneity of interest among the typical cooperative's members. Most cooperatives handle only a single agricultural commodity. This commodity is itself exceptionally homogeneous, to the point where the produce of the various members is commonly fungible. This means that the members of the cooperative all share the relatively simple goal of maximizing the value of the commodity involved. Costs of collective decision making, as a consequence, can be kept to a minimum.

The scarcity of cooperatives that handle more than one commodity is strong evidence of the importance of this homogeneity of interest. Cooperatives handling multiple commodities can potentially derive substantial gains from risk diversification and common marketing. Nevertheless, they are rare. Presumably this is because it is difficult to find an objective basis for apportioning costs and revenues. Growers of the different products are likely to disagree about important aspects of the firm's operations, raising haggling costs and leading to decisions

that exploit one commodity for the benefit of another or are otherwise inefficient.

Indeed, the few cooperatives that handle more than one commodity give evidence of just such problems. For example, canneries in California commonly pack more than one crop in order to realize economies of scale and scope. In the canneries operated as cooperatives, this creates conflicts among growers of the different crops in apportioning costs and revenues. Initially these cooperatives operated on a "single pool" system, under which, instead of accounting for costs and revenues separately by crop, each cooperative's aggregate annual profits were simply divided up among growers of the different crops according to a measure of the value of the raw crops they supplied. The measure chosen was the "field price" of the crop, which is the market price paid by proprietary canners. An important reason for choosing this method was its objectivity. But the field price was sometimes ambiguous and was often not an accurate index of the relative profitability of the crop to the cooperative, inducing growers of individual crops to argue that the crop's current field price was "unrealistic" or "unfair." The result was significant conflict among the board members representing growers of different crops as to whether there should be deviation from a specific crop's field price as a measure of value or whether the allotment for a given crop (that is, the aggregate amount purchased by the cooperative) should be increased or decreased because of the crop's current profitability to the cooperative. Moreover, for some crops there was no field price because the cooperative was the only packer. In these cases, the cooperative's board, which was dominated by growers of other crops, would treat growers of the crop the way a proprietary canner would, paying them no more than was necessary to induce supply.[58]

These conflicts consumed substantial amounts of energy from board members and managers and finally led the cooperatives to abandon the single pool system in favor of the "multiple pool" system, under which the cooperative's revenues and costs are accounted for separately for each crop.[59] Yet the apportionment of overhead and other common costs among different crops is necessarily a very subjective process. In addition, under multiple pooling the returns to growers of a given crop can depend heavily on the cooperative's allocation of resources to processing and marketing that crop. Consequently this method, like single pooling, intensely politicizes many operational decisions, breeding substantial conflict for board members and managers and leading to much second-guessing of management by the board of directors. Indeed, one suspects that the difficulties of governing multiple-crop canneries as cooperatives is important in explaining the strong dominance of investor-owned canneries before the industry fell into decline in the 1960s.

It is not only the canneries that have elected the multiple pool system. The relatively few cooperatives of other types that handle more than one commodity commonly do the profit accounting for each crop separately.[60] For example, Land O'Lakes, which primarily markets milk products, also markets turkeys, but makes the latter operation a separate profit center so that turkey growers internalize all their own costs and benefits.[61] Similarly, in order to gain important economies of scope in marketing, Ocean Spray added grapefruit and guava products to its traditional business of cranberries. But the grapefruit growers were formed into their own separate pool, and the guavas are purchased on a commercial basis rather than making the growers members of the cooperative.[62]

Even in the single-crop cooperatives, the conflicting interests of different growers can be significant. For example, although Ocean Spray is dominated by the cranberry growers, "on the board there is a lot of politics," particularly involving the disparate interests of cranberry growers from different geographical regions.[63] In the California fruit bargaining and marketing cooperatives, grading of members' fruit by quality and condition is such a sensitive issue that the cooperatives' managers are reluctant to get involved and commonly contract out the evaluation to independent third parties.[64] Indeed, even among growers of a single crop, accommodation of conflicting interests through collective governance can sometimes bring important efficiency costs.

For example, Hetherington describes a situation in which a strike closed the California fruit and vegetable canneries for eleven days at the peak of the 1976 peach canning season. The investor-owned canneries, observing that the industry inventory of canned peaches was already substantial and demand was weak, simply invoked the force majeure clauses in their contracts and declined acceptance of the fruit that would otherwise have been processed during the period involved, letting the fruit be lost at the expense of the growers. The cooperatives, in contrast, stored the fruit that would have been packed during this period and operated overtime to pack it rapidly at the end of the strike.

By this means they managed to save nearly all the fruit that ripened during the strike. But they also incurred substantial additional costs and packed excessive amounts of fruit for which there was weak demand.

The cooperatives chose this inefficient course to avoid imposing disproportionate costs on some of their members. This norm of equality of treatment—so common as a means of avoiding the costs of conflict in collective decision making, as we saw in Chapter 5—could have been preserved at much lower cost by allowing the fruit in question to spoil while still letting its growers share in the profits from the pool as if it had been packed. But the growers whose fruit had been canned before the strike were unwilling to accept this solution, evidently in part because of the difficulties of deciding, for purposes of determining shares in the pool, the quantity and quality to impute to fruit left unpicked.[65] The equality norm has also led to continued inclusion in the cooperatives of growers that deliver inefficiently small volumes or that are located in areas that have become uneconomical.[66]

The extreme importance of homogeneity of interest also seems a likely explanation for the fact that cooperatives tend to have a larger market share in those crops that are particularly simple to grade, such as grains and milk, than in those that are not, such as vegetables and livestock.[67] Among fruits and vegetables, for similar reasons, the cooperatives have not had much success with highly perishable varieties and have concentrated on the less perishable varieties.[68] This is apparently because, as in the canning cooperatives, perishability makes crops more difficult to grade and also creates disparities in value based on the time the crops ripen—the crops ripening at the peak of the season generally being less valuable than those that ripen at other times, for example. The ease of resolving conflicting interests among the owners seems to be a more important consideration, in determining the assignment of ownership, than are the costs of contracting that arise when investor-owned purchasers try to exploit the pressure to sell that faces growers of perishable crops.

Finally, although various attempts have been made, there have been no successful nationwide bargaining cooperatives. An important reason for this, it has been argued, is that it would be too difficult to reconcile the divergent and conflicting interests of all the farmers involved.[69] This suggests, in turn, that the governance costs of such an organization would be substantial enough to outweigh the potential gains from increased market power and the economies in information and bargaining costs that the organization could offer its members.

Homogeneity of interest clearly plays a critical role. Where interests among potential members conflict even modestly, marketing cooperatives do not experience much success. Conversely, where the farmers involved have nearly identical interests, marketing cooperatives thrive even when the costs of contracting with investor-owned firms appear relatively modest.

The homogeneity of interest emphasized here, as elsewhere in the book, involves similarity in the types of transactions that members have with the cooperative—or, more precisely, similarity in the effect that any decision by the cooperative will have upon transactions between the cooperative and each of its various members. But there is evidence that homogeneity among the members along other, more personal dimensions can also be important. For example, cooperatives seem to have been particularly successful when the local farmers have shared unusual cultural homogeneity, as where they are mostly of Scandinavian descent. And in spite of strong incentives to form tobacco cooperatives in the South—incentives that arose from both monopoly and asymmetric information—these cooperatives were slow to form and grow, evidently owing in substantial part to the black-white split among farmers.[70]

Capital Supply

For the reasons discussed in Chapter 4, the equity capital required by farm marketing cooperatives must generally be raised from the cooperatives' farmer-members.[71] There are obvious costs to having farmers provide this capital. Modern farms, though predominantly family-owned businesses, are relatively capital intensive. Therefore farmers are unlikely to have substantial amounts of liquid capital available to invest elsewhere. In addition, the returns to a farmer from investing in a marketing cooperative are likely to be positively correlated with the returns to his farm. Since farming is a volatile business in itself, this means that a marketing cooperative is a highly risky investment for a farmer.

Nevertheless, it is not apparent that difficulty in raising capital has substantially inhibited the formation and growth of farmer cooperatives. Many marketing cooperatives are relatively heavily capitalized.

Some of this capital is obtained by borrowing. Much of it, however, is equity capital raised from members.[72] For example, as of 1992 the members of the National Grape Co-operative (Welch's) had each invested an average of $54,000 in the firm, or more than $1,900 per acre contracted to the cooperative, making this investment close to the members' total investment in production assets.[73] Even more impressively, in 1989, the book value of equity in Ocean Spray Cranberries—surely an underestimate of the actual value—was $242,000 per member.[74] And the California canning cooperatives commonly require that members maintain an investment in the cooperative well in excess of 100 percent of the average value of their total annual crop.[75]

In fact, interviews with managers of agricultural cooperatives have not reflected any general sense that their organizations have suffered from serious capital constraints, or even that the cooperatives have found it harder to raise capital than have their investor-owned counterparts.[76] For farmer-owned enterprise, as for worker-owned enterprise, risk bearing and liquidity constraints are evidently far less important constraints than one might expect a priori.

The methods used by the marketing cooperatives to raise equity capital are often highly refined and carefully designed. The same methods are used by farm supply cooperatives, which also are often heavily capitalized. We shall examine those methods with care in Chapter 8.

Why Not Vertical Integration?

An obvious alternative to farm marketing cooperatives is simple vertical integration, in which the marketing firm owns the farms that supply it. Why is it that Ocean Spray, for example, does not simply own its own cranberry bogs? Or why does Land O'Lakes not own its own dairy farms? Vertical integration would presumably serve just as well as farmers' cooperatives, and perhaps much better, in avoiding the costs of market contracting. Moreover, vertical integration would provide easier access to capital and would avoid the cumbersome constraints and costs imposed on cooperatives by potential conflicts of interest among their farmer-members.

The reason is clearly that, in growing most crops, the family-owned farm remains the most efficient unit of production. Economies of scale are not substantial,[77] and individual ownership provides strong incentives for working when and how it is most effective. It is not for lack of imagination that General Mills does not meet its needs for wheat by owning and operating huge corporate farms as subsidiaries. Large-scale corporate farming was experimented with extensively as early as the late nineteenth century, but has never been able to compete with family farms in most basic crops.[78]

Marketing cooperatives allow farmers to achieve economies of scale where they are significant—namely, in marketing—and to accomplish some economies from vertical integration, while at the same time leaving individual ownership in place where its incentive effects are most important. The flexibility thus afforded by the cooperative form will become even more apparent in Chapter 8, where we examine the farm supply cooperatives from which farmers obtain a large fraction of their farming inputs. Through appropriate use of both consumer and producer cooperatives, small family farms have remained the basic unit of agricultural production while, at the same time, those farms have been vertically integrated with very large firms both above and below them in the stream of production. This neatly articulated system of ownership manages to economize on the costs of market contracting while simultaneously providing effective monitoring of managers where economies of scale are large and, where economies of scale are small, maintaining the strong incentives of owner-entrepreneurship.

The Scarcity of Other Types of Producer Cooperatives

We observed, at the beginning of Part II, that there are only three common types of collectively owned enterprise that are owned by their suppliers: investor-owned firms, worker-owned firms, and farmer-owned firms. Other types, to be sure, can occasionally be found. For example, the owners of independent oil wells located in a given oil field sometimes collectively own the oil pipeline to and through which they sell their oil.[79] Some of the business-owned service cooperatives described in the next chapter, although classified there as consumer cooperatives, could instead be labeled producer cooperatives. For example, Allied Van Lines, the largest firm in the United States providing long-distance moving of household possessions, was from 1928 to 1968 a cooperative owned by the many local moving companies that actually provided the firm's services.

As this example indicates, the line between supplier-owned and consumer-owned enterprise is often vague. When Allied Van Lines

was organized as a cooperative, was it a producer cooperative owned by the local firms that provided the company with the trucks and personnel it used to perform its services? Or was it a consumer cooperative, owned by local moving firms that purchased marketing and dispatching services from the central organization? Similarly, worker-owned firms might often be characterized, not as producer cooperatives, but as consumer cooperatives in which workers collectively own the firm that supplies them with the capital and coordination services they need to work effectively. As the analytical framework offered in Part I suggests, very little depends on whether we label the patrons who own a given firm suppliers or customers. It is principally for simplicity of exposition that firms have been separately grouped here, in Parts II and III, into producer-owned and consumer-owned enterprise.

Nevertheless, regardless of how we choose to classify the borderline cases, there are few examples of producer-owned collective enterprise where the owners are not investors, workers, or farmers. In contrast, there are many different types of consumer-owned enterprise. Why, then, are there only three common types of producer-owned enterprise?

The answer is evidently that there are few inputs other than financial capital, labor, and agricultural crops that meet the essential characteristics, namely: (1) the input is highly homogeneous; (2) the input is provided by a number of different suppliers, none of which is large enough in itself to supply all the needs of a purchaser of efficient scale; (3) there is a compelling efficiency reason to keep the suppliers separate as producing entities rather than merging them under unified control (as would happen if a purchasing firm simply acquired all its suppliers); and (4) a firm's purchases of the input would be attended by some degree of market failure if those purchases were conducted just by means of market contracting.

Our survey of farm marketing cooperatives has reaffirmed the conclusion suggested by our earlier discussion of worker-owned firms, a conclusion that will be further underlined in the chapters that follow: condition (1) is more important than condition (4). Where the input is not highly homogeneous, collective supplier ownership generally does not succeed even in the presence of substantial market failure. Conversely, if the input is highly homogeneous, collective supplier ownership is often viable even if the costs of contracting with an independently owned purchaser would be relatively modest.

Condition (3), however, also deserves attention. In the case of labor, it is satisfied because of the degree of decision-making autonomy that is characteristic of every human being, and because the social prohibition of slavery reinforces this autonomy. For agricultural commodities it is satisfied because the family-owned farm remains the most efficient production unit for most crops.

Why is condition (3) satisfied for the independent oil producers in a given oil field? Presumably the reason is that, although the oil produced by the different properties is essentially the same (since they are generally all situated on top of the same pool of oil), the parcels of land themselves are not homogeneous with respect to the amount of oil believed to lie under them or the ease of extracting the oil from them. This heterogeneity often prevents the owners of the individual parcels in an oil field from forming a single cooperatively owned production firm for the field as a whole, even though they would achieve substantial efficiency advantages from doing so.[80] With cooperative production of that sort, there would be no occasion for collective ownership of pipelines. These observations further underscore the importance of homogeneity of interest: the parcel owners are capable of coming together in cooperative ownership of a pipeline to ship their oil, an enterprise in which the homogeneity of interest is high but the potential efficiency gains are modest; yet the same parcel owners are incapable of organizing a jointly owned production firm, where there is less homogeneity of interest but the potential efficiency gains are large.

Conclusion

Farm marketing cooperatives thrive even where the potential costs of market contracting appear relatively low. The success of the cooperatives does not seem to depend importantly on their own exploitation of monopoly power or on governmental tax preferences or subsidies. Risk bearing and accumulation of capital have apparently not been important obstacles.

These observations reinforce the general conclusions suggested by our earlier study of investor-owned firms and employee-owned firms: where the costs of ownership are low—and, in particular, where the potential producer-owners have highly homogeneous interests—producer cooperatives can succeed even in the absence of serious market imperfections that would make market contracting costly for the producers. This presumably accounts for the impressive growth in the overall market share of farm marketing cooperatives in the United States and other countries over the course of the twentieth century: although the monopsony power of farm product purchasers has evidently decreased over this period, the costs of ownership for farmer cooperatives have apparently decreased even faster.

To be sure, these general inferences are slightly clouded by the fact that each of the types of producer-owned enterprise examined in Part II exists, in the United States and in most other countries, in a relatively complex and specialized legal and institutional environment that obscures somewhat the importance of competing efficiency considerations. When we turn to consumer-owned enterprise, we shall find that such biases play a smaller role (or at least a less ambiguous one), making it easier to draw conclusions about relative efficiency.