

The Democratic Firm:

A "Non-Economic" Approach to the Problem of Distribution based on Property Theory and Democratic Theory

David Ellerman
World Bank* †

1998

Table of Contents

Introduction

An Approach to the Problem of Distribution
Human-Capital-ism

A Descriptive Theory of Property

The Life-Cycle of a Property Right
Theory of Appropriation
The "Fundamental Myth" about Property Rights
"Ownership of a Firm" and Ownership of a Corporation
The Fundamental Myth in Capital Theory and Corporate Finance Theory

A Normative Theory of Property

The Principle of Responsibility
Application to Appropriation of the Whole Product
Brief Intellectual History of Responsibility Theory of Appropriation
De facto Inalienability of Human Action

The Approach to a Theory of the Firm from Democratic Theory

The Democratic Principle
The Hidden Intellectual History of Non-democratic Liberal Thought
Consent versus Coercion: The Fundamental Issue According to Capitalist Liberalism
The Pactum Subjectionis
The Self-Sale Contract
Nozick's Ultra-Capitalist Libertarianism
Brief Intellectual History of Inalienable Rights Theory
The Reformation Doctrine of Liberty of Conscience
Francis Hutcheson's Notion of Unalienable Rights
Richard Price's Inalienable Right of Self-Government
Application of Democratic Theory to the Firm

Corporate Governance Applications

Review
Rights-based Constraints and Efficiency Arguments

* The findings, interpretations, and conclusions expressed in this paper are entirely those of the author and should not be attributed in any manner to the World Bank, to its affiliated organizations, or to the members of its Board of Directors or the countries they represent.

† Research on this paper was funded in part through a contract with the Brookings Institution, through its project on Corporations and Human Capital. Opinions expressed in this article are those of the author, and not those of the Brookings Institution, its officers, directors, or financial supporters.

Rights as Trumps
Rights Conclusions from Efficiency Arguments?
Conceptual Entry Points in the Corporate Governance Debate
What Do Bosses Do? Bosses Stop the War of All Against All
Neo-Hobbesian Theories of the Firm
Hansmann, Madison, and the Costs of Collective Decision-Making
The Japanese Human-Capital-ist Firm
The Nexus of Contracts Theory
Dissolving the Firm into the Nexus of Contracts
Property Theoretic Analysis of the "Nexus of Contracts"
Shareholder Theory
Who are to be the Members of the Company?
The Oxymoron of "Shareholders' Democracy"
The Shareholders' Property Rights
Stakeholder Theory
The Others Stake Their Claims
Corporate Social-ism Redux
The Only Workable Constituency
Similarities with Rationale for Voucher Investment Funds
Stakeholders' Control Rights
Who's the Firm? The *De Jure* Firm and the *De Facto* Firm

Final Points

References

Introduction

An Approach to the Problem of Distribution

In some fields of intellectual inquiry, it is the questions that are difficult, not the answers. Once the questions are well-formulated, the answers might be quite straightforward. Questions involve assumptions and a conceptual framework. Much of the work in developing a theory—such as a theory of the firm or a theory of distribution—is in building up the conceptual framework to pose the right questions.

What are the questions that a "theory of the firm" is supposed to answer? Many theories of the firm are aimed at answering vastly different questions, so the theories do not give competing answers to the same question. I will develop a theory of the firm based on an approach to the problem of distribution from property theory and democratic theory. A positive or descriptive property theory describes how property rights are initiated, transferred, and terminated in a private property market economy. A normative or ascriptive property theory gives norms for the initiation and termination of property rights and the constraints on the transfer of those rights.

This approach is "non-economic" in that it is not based on efficiency criteria. The usual "economic" approach to the firm is to emphasize cost minimization or, more generally, allocative efficiency.¹ "The main hypothesis is that contractual designs, both implicit and explicit, are created to minimize transaction costs between specialized factors of production." [Holmstrom and Tirole 1989, 63] While this economic approach has its domain of applicability, it should operate within a framework of norms for the initiation and termination of property rights and of constraints on the transfer of property rights. That framework is deontic or rights-based, not utilitarian or efficiency-based. The rights-based arguments provide "trumps" [see Dworkin 1978] or normative "side-constraints" [see Nozick 1974] that limit the area where optimizing arguments may be applied.

Several examples of rights-based trumps are readily available in economics and political economy. For instance in human capital theory, the economic efficiency or inefficiency of selling human capital (e.g., in a self-sale contract) is not actively debated; it is simply ruled out.

Since slavery was abolished, human earning power is forbidden by law to be capitalized. A man is not even free to sell himself: he must *rent* himself at a wage." [Samuelson 1976, 52]

Political vote-selling by the ultimate voters provides another example.

Any good second year graduate student in economics could write a short examination paper proving that voluntary transactions in votes would increase the welfare of the sellers as well as the buyers. [Tobin 1970, 269]

Yet instead of following the dictates of efficiency-based reasoning in law and economics, this practice is also ruled out in present-day society.

¹ For an excellent anthology exclusively on the "economic" analysis of the firm, see Putterman and Kroszner [1996].

The domain of the rights-based arguments is broader than is ordinarily thought, and accordingly the domain of efficiency-based arguments is more confined. Many of the efficiency-based arguments for one or another type of firm are ultimately as irrelevant as an analysis of the relative efficiency of cotton being produced by free or slave labor.

Human-Capital-ism

In modern times, human capital (i.e., educated labor) has become increasingly important in contrast to land and physical or financial capital as a factor of production. It might be argued that the large Japanese company has evolved so that human capital has in effect become the residual claimant and that the system could be called "human-capital-ism"² [see Itami's chapter in Imai and Komiya 1994, or Matsumoto 1991]. Margaret Blair [1995] has developed arguments, largely within the methodology of the economic theory of the firm, that human capital should increasingly be treated as a residual factor—a factor with net income and control rights associated with "ownership" of the corporation. For instance, much human capital is firm-specific so workers might be vulnerable to opportunistic behavior by managers representing absentee owners. The workers will have little incentive to make that investment in firm-specific capital unless accorded some of the control and security normally associated with being "inside" the firm (as opposed to being a hired factor). Moreover it is very difficult to describe and enforce the supply of human capital in a contract (as opposed to the supply of land, physical or financial capital, or even simple manual labor) so the human capital suppliers need to be "vertically integrated" into the firm to align their incentives with the firm. Since the corporation cannot own the human capital, the human capitalists need to have ownership rights in the corporation.

But this last point raises a very different line of thought. What is it about *human* capital that makes it so different from physical or financial capital that it is forbidden by law to buy and sell human capital? If the reason for that prohibition of certain voluntary market transactions is well understood, might there be other implications? After all, the usual employment contract is essentially the contract for renting or hiring human capital, i.e., for buying the services of human beings.³ The forbidden contract to buy a person's human capital is essentially a long-term (up to retirement age) version of the permitted short-term rental contract. This prohibition could hardly be based on efficiency grounds since economists routinely ignore the prohibition against lifetime labor contracts in order to have the complete future markets in all commodities necessary to show the allocative efficiency of competitive equilibrium.

Now it is time to state the conditions under which private property and free contract will lead to an optimal allocation of resources.... The institution of private property and free contract as we know it is modified to permit individuals

² "Human-capital-ism" is to be parsed as (Human-capital)-ism, not as Human-(capital-ism), i.e., as the "ism" of human capital, (laborism), not as a "humanized" form of capitalism.

³ "One can even say that wages are the rentals paid for the use of a man's personal services for a day or a week or a year. This may seem a strange use of terms, but on second thought, one recognizes that every agreement to hire labor is really for some limited period of time. By outright purchase, you might avoid ever renting any kind of land. But in our society, labor is one of the few productive factors that cannot legally be bought outright. Labor can only be rented, and the wage rate is really a rental. " [Samuelson 1976, 569]

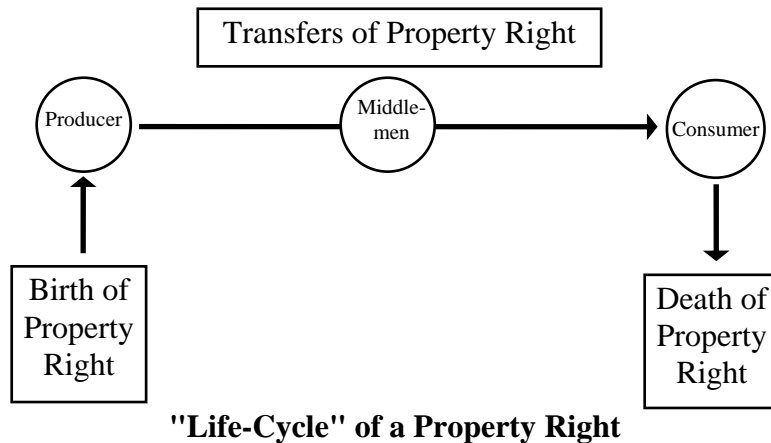
to sell or mortgage their persons in return for present and/or future benefits.
[Christ 1975, 334]

This paper pursues the "non-economic" line of thought based on the distinctive features of *human capital*. The line of approach is through descriptive and normative theories of private property and through democratic theory. The prohibition against the sale of human capital is approached through the theory of inalienable rights that descends from the Reformation and the Enlightenment and that was pivotal in the development of modern anti-slavery and democratic thought.

A Descriptive Theory of Property

The Life-Cycle of a Property Right

A positive or descriptive theory of property for a private property market economy should describe how property rights are created or initiated, how they are transferred from party to party, and finally how property rights are terminated.



Property rights are created in firms and households, and property rights are also terminated by firms and households. In between is the market where property rights are transferred. The instrument for transferring property rights is the voluntary contract which is fulfilled by the transfer of the *de facto* possession and control of the property from the old owner to the new owner (usually in exchange for other property going in the opposite direction).

Theory of Appropriation

While it is well-known that property rights are transferred by voluntary contract, what is the legal means by which property rights are initiated and terminated in a private property market economy? It will be helpful to first establish some notation and terminology. Consider a simplified description of a productive opportunity $Q = f(K,L)$ where the outputs Q are produced by applying the labor L to the capital services or non-labor inputs K . Many different types of labor and non-labor inputs could be considered but that would only complicate the notation and would not change the underlying logic. The initiation of a property right is called the "appropriation" of the property right. Symmetrically the termination of a property right might be called the "expropriation" of the property right but that word has now been corrupted to mean the

forced transfer or "taking" of property by the state.⁴ The use of the word "expropriation" can be avoided by referring to the "expropriation of the assets X" as the "appropriation of the liabilities -X."

In the productive opportunity $Q = f(K,L)$, the property rights to Q are initiated and the property rights to K and L are terminated so this could be described as the appropriation of the assets Q as well as the appropriation of the liabilities -K and -L. It will be useful to adopt a simple vector notation with three components representing outputs, non-labor inputs, and labor inputs respectively. Thus the vector of outputs or assets appropriated in production is (Q,0,0) and it will be called the "positive product." The vector of liabilities (signifying the used-up inputs) appropriated in production is (0,-K,-L) and it will be called the "negative product." Summing the positive and negative products component-wise gives vector of assets and liabilities appropriated in the productive opportunity (Q,-K,-L) which I will call the "whole product."

$$\begin{aligned} \text{Positive Product} &= (Q,0,0) \\ + \text{Negative Product} &= (0,-K,-L) \\ = \text{Whole Product} &= (Q,-K,-L) \end{aligned}$$

The "whole product" is simply a property theoretic name for the production vector familiar to economists in the production set treatment of production where the outputs are listed positively and the inputs are listed negatively.⁵

How does a private property market economy determine who appropriates the whole product? There is a "laissez-faire" or market mechanism of appropriation. A non-market assignment of liabilities by the legal authorities takes place in a trial for property damages when the defendant is found guilty and held liable for some property that was destroyed. To understand the market mechanism, one must consider who would appropriate the liability -X (i.e., terminate the property right to X) if the property X is used-up, consumed, or otherwise destroyed when the legal authorities do not intervene. In that case, the liabilities -X are borne by the last legal owner of X. Thus one could say that in the absence of any state intervention to reassign liabilities, the liabilities -X for used-up or destroyed property X is "laissez-faire appropriated" by the last legal owner of X. Furthermore, that same legal party who bore the liabilities would have the defensible legal claim (in the absence of any reassignment of the liabilities) to any new property that might be created in the process of using up the old property.

⁴ "This word [expropriation] primarily denotes a voluntary surrender of rights or claims; the act of divesting oneself of that which was previously claimed as one's own, or renouncing it. In this sense, it is the opposite of 'appropriation'. A meaning has been attached to the term, imported from foreign jurisprudence, which makes it synonymous with the exercise of the power of eminent domain," [Black 1968, 692, entry under "Expropriation"]

⁵ The production vector is also called a "production possibility vector" [Arrow and Debreu 1954, p. 267], an "activity vector" [Arrow and Hahn 1971, p. 59], a "production" [Debreu 1959, p. 38], an "input-output vector" [Quirk and Saposnik 1968, p. 27], or a "net output vector" [Varian 1984, p. 8].

Market Mechanism of Appropriation

Let the liabilities for the used up inputs lay where they have fallen (i.e., in the hands of the last owner of the inputs), and then let that party have the claim on any produced outputs.

It should be noted that this mechanism of appropriation only works for produced outputs as opposed, for example, to gifts of nature.

In terms of our example, the last legal owner of the non-labor inputs K and labor inputs L would laissez-faire appropriate the negative product $(0, -K, -L)$. In the absence of any state intervention to reassign those liabilities, that same party would have the defensible legal claim on the positive product $(Q, 0, 0)$. Putting the two products together, one has the market mechanism for the appropriation of the whole product $(Q, -K, -L)$. The legal party who appropriates the whole product of a productive opportunity will be called the "firm" (with respect to that opportunity). Since that party would pay for the liabilities $-K$ and $-L$ and receive the revenue from the outputs Q , the whole product appropriator is also called the "residual claimant."

The "Fundamental Myth" about Property Rights

The "market mechanism of appropriation" might all seem like a fancy way to restate the obvious, but it has quite strong implications. For instance, it shows that in order for a legal party to be the "firm" with respect to a given productive opportunity, it is sufficient for the party to be the last legal owner of all the inputs used up in the production process. Then that party has the defensible legal claim on the outputs that emerge in production so that party would appropriate the whole product. Since it is the fact-pattern of the input contracts (e.g., whether capital hires labor or labor hires capital) that determines who is the last legal owner of the used-up inputs, the identity of the firm ("firmhood") is contractually determined. There is no need for the legal party to additionally "buy" or "own" the production function or production set. There is no such thing as the "ownership" of a production function or production set in a private property market economy. It is not by the "ownership" of a production set that production or whole product vectors are assigned to legal parties but by the market mechanism of appropriation.

The idea that there is a property right (variously called "ownership of the firm", "ownership of the production function", "ownership of the productive opportunity" and so forth) which determines which party legally appropriates the whole product of a productive opportunity is such a pervasive and important idea that it will be called the "fundamental myth" about property rights. An understanding of the fundamental myth is important to our argument because the argument tries to "trump" the efficiency-based economic theories of the firm with a right-based theory about the norms for appropriating assets and liabilities in production (see below for the normative theory). But if it is thought that the whole product is already owned by the "owner of the firm" then the entire question of appropriation (initiation and termination of property rights) in production is not even formulated. That is indeed the usual case in the economics literature.⁶

⁶ For example in Putterman and Kroszner anthology [1996] on the "economic" nature of the firm, none of the papers pose the question of appropriation in their treatment of the firm. The question of appropriation in the firm is similarly ignored in the "economics of property rights" [e.g., Furubotn and Pejovich 1974] and in the so-called "property rights approach" to the firm [e.g., Hart and Moore 1990; Hart 1995].

As noted in the introduction, one must develop the right conceptual framework just in order to ask the appropriate questions.

"Ownership of a Firm" and Ownership of a Corporation

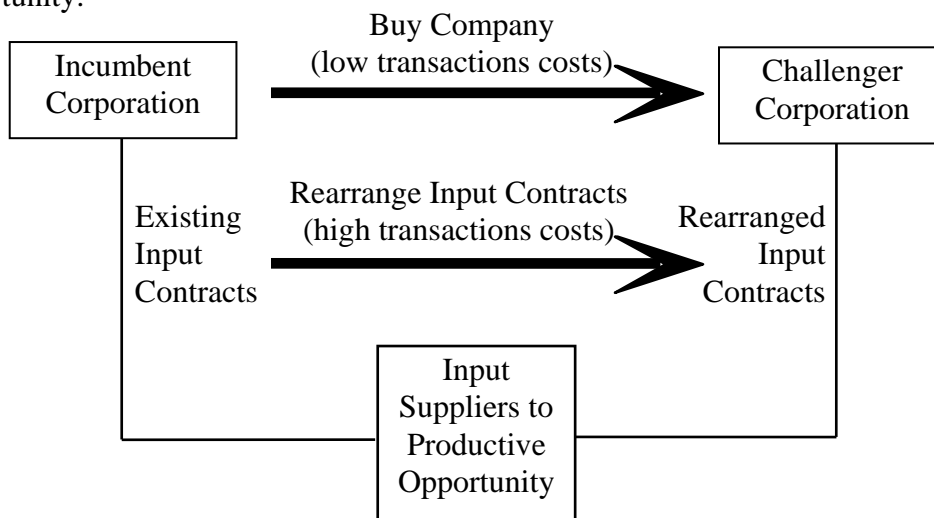
What are the origins of the fundamental myth that firmhood is established by an ownership right ("ownership of the firm") rather than by the contractual status of being the last legal owner of all the inputs to production? Perhaps the most common origin is a misinterpretation of the "ownership of a corporation." Before turning to that, it might be noted that economists use the notion of "ownership of the firm" in more general contexts independent of corporations. In an abstract model, entrepreneurs are "bidding for ownership of the firms" [Hirshleifer 1970, 124] and become the "owners of the productive opportunity" [125]. A proprietor may sell "the rights to the transformation function" or "his rights to the venture" [Fama and Jensen 1985, 341] to another proprietor. The entrepreneur is the "owner of a production function" [Haavelmo 1960, 210] and even Robinson Crusoe "owns the firm" [Varian 1984, 225].

The most common or "standard" origin of the "ownership of a firm" notion is to (mis)interpret the ownership of a corporation that is currently undertaking a production opportunity $Q = f(K,L)$ (by virtue of its contractual position) as being "ownership" of the productive opportunity. But this interpretation can be easily defeated by changing the contractual position of the corporation without changing its ownership. For instance, if the capital services K were hired out rather than the labor services L being hired in, then the "firm" in the sense of whole product appropriator would shift but the ownership of the corporation would be in the same hands. The role of the corporation would shift from being the firm (with respect to that opportunity) to being an input supplier to the firm.

This argument might be better understood by considering a productive opportunity both outside and inside a corporate form. Consider a simplified process where the labor L is applied using the services K of a widget-maker machine in order to produce the widgets Q during each time period. If the machine is owned by an individual, then it is clear that the person could hire in the labor L and produce Q —or could hire out the services K to another party. The pattern of contracts determine whether the individual operates as the firm (with respect to that opportunity) or as an input supplier to the firm. Now suppose that the individual incorporates a company and issues all the stock to himself in return for the machine. This legal repackaging changes nothing in the market logic of the argument that separated capital ownership from residual claimancy. The corporation (rather than the individual) would own the widget-maker machine and, depending on the direction of the hiring contracts, may or may not appropriate the whole product of the productive opportunity using the widget-maker. The process of incorporation does not miraculously transubstantiate the ownership of a capital asset into the ownership of the whole product vectors that might be produced using the capital asset.

In realistic markets, there are likely to be large transaction costs to rearranging the input contracts. The incumbent corporate residual claimant has sizable first-mover advantages so that any challenging party would have to incur such high transaction costs to redirect the input contracts that it might be just as cheap or cheaper to simply buy the corporation and thereby take over the residual claimant's position in the existing pattern of input contracts. These transaction

cost barriers create the image that the existing corporate residual claimant "owns" the production opportunity.



**Two Ways to Take Over a Production Opportunity
and thus "Become the Firm"**

One of the advantages of idealized frictionless models in economics, as in physics, is that they show the basic logic of the system without irrelevant distractions. In a world without transaction costs, the input contracts could be costlessly rearranged to switch residual claimancy from one party to another without changing the ownership of a corporation from one party to another. That shows the underlying logic of the contractual determination of residual claimancy in a private property market economy.

The transaction cost barriers to rearranging contracts in real-world markets create the illusion of a property right such as the everyday notion of "ownership of the firm." Transaction cost barriers are only that; they are not property rights. For instance, as transaction costs change it might become more feasible to acquire residual claimancy by rearranging input contracts rather than by purchasing the corporation. This would not violate the corporation's "ownership of the production set" since it had no such property right in the first place.⁷

⁷ While the lay misinterpretation of ownership of a corporation might be understandable in a world of significant transactions costs, it is less clear why economists should still be wedded to the lay concept in the "standard model" of general equilibrium in an idealized world free of transaction costs. For instance, the fabled attempt by Arrow and Debreu [1954] to show the existence of a competitive equilibrium with positive "pure profits which are distributed to the owners of the firm" [Arrow 1971, 70] is flawed *in theory* because they incorrectly assume there is the ownership of production sets in a private property market economy. To pinpoint the error in their mathematical formulation, the problem is not in assuming corporate ownership, i.e., that the i^{th} consumer owns "a contractual claim to the share a_{ij} of the profit of the j^{th} production unit" [Arrow and Debreu 1954, 270] where "production unit" is a corporation. The error is the assumption that for "each production unit j , there is a set Y_j of possible production plans" [267] and that this corporation is the only party allowed to bid on the inputs for that production opportunity. The ownership of a corporation is misinterpreted as the ownership of a production set even in the idealized frictionless model where a challenger corporation could bid slightly higher for the inputs (and get lower but still positive profits) to take over a production opportunity and thus defeat the purported "competitive equilibrium" with positive pure profits.

The Fundamental Myth in Capital Theory and Corporate Finance Theory

The fundamental myth has an important role in many parts of conventional economics. I will only touch on its role in capital theory and corporate finance theory as that has some relevance for our current topic.

One of the simplest forms of the fundamental myth is the assumption that the bundle of rights that constitute ownership of an asset includes "a right of ownership-over-the-asset's-products, or *jus fruendi*" [Montias 1976, 116] or simply "the right to the products of the asset" [Putterman 1996, 361]. The ambiguous *jus fruendi* expressions are innocuous if the "products of the asset" such as the aforementioned widget-maker asset are just the services K . But the expressions involve the fundamental myth if the "products of the asset" includes the product Q . That latter version of the fundamental myth pervades orthodox capital theory and is then carried over to corporate finance theory (viewing a corporation as a complex machine).

Suppose that the widget-maker machine yields K units of machine services per year for n years and then has no scrap value. The asset owner has the property right to the stream of capital services K or, in vectorial terms, $(0, K, 0)$ each year for n years. But if the asset owner also has the contractual role of the firm or residual claimant in that production opportunity for the n years, then that party will additionally appropriate the whole products $(Q, -K, -L)$ which sum for the stream of net ownership vectors $(Q, 0, -L)$ for n years [the first row plus the second row equals the bottom row in the following table 1].

	Year 1	Year 2	...	Year n
Property vector owned by asset owner.	$(0, K, 0)$	$(0, K, 0)$...	$(0, K, 0)$
Property vector appropriated by last owner of inputs (residual claimant).	$+ (Q, -K, -L)$	$+ (Q, -K, -L)$...	$+ (Q, -K, -L)$
Net property vector accruing to asset owner who is <i>also</i> the residual claimant.	$= (Q, 0, -L)$	$= (Q, 0, -L)$...	$= (Q, 0, -L)$

Orthodox capital theory then discounts the value of the net vectors $(Q, 0, -L)$ [bottom row in table 1] back to the present to arrive as the "capitalized value of the asset" as if the right to the whole products [second row] had been part of the ownership of the assets. But the appropriation of the whole products is contingent on a certain contractual fact-pattern, and it is not a violation of the ownership rights of the asset owner to have the asset hired out instead of labor being hired in. Thus the value of the whole products ("profits") might or might not go to the asset owner depending on the future pattern of the input contracts. The so-called "capitalized value of the asset" is actually the value of the asset [discounted value of the $(0, K, 0)$ stream in the first row] plus the discounted value of the stream of whole products [discounted value of the $(Q, -K, -L)$ stream in the second row]—where the latter may or may not accrue to the asset owner.⁸

⁸ We shall later see the decision-making version of the fundamental myth wherein the decision authority over people using an asset is seen as part of the ownership of the asset.

There is no legal necessity that the owner of the machine be the residual claimant (with respect to the widget making process), and the same holds when the owner is a corporation. Yet corporate finance theory carries over the same capital-theoretic mistake of interpreting the whole product as part of corporate ownership. For instance, the discounted cash flow method of valuation routinely assigns to the corporation the present value of the net cash flows [e.g., from (Q,0,-L) on the bottom row of the table] from production rather than the present value of the cash flows from the services of the underlying corporate assets [e.g., from (0,K,0) on the top row].

There, in valuing any specific machine we discount at the market rate of interest the stream of cash receipts generated by the machine; plus any scrap or terminal value of the machine; and minus the stream of cash outlays for direct labor, materials, repairs, and capital additions. The same approach, of course, can also be applied to the firm as a whole which may be thought of in this context as simply a large, composite machine. [Miller and Modigliani 1961, 415]

But in order to plausibly count the future whole products as part of the present property rights of the corporation, all the future input contracts would have to be made in favor of the corporation at the present time. Moreover, since contracts are generally not enforceable until one side performs, the corporation would have to have paid all future input contracts at the present time. Only then could the corporation have a plausible claim on the future whole products. Since those conditions would hardly be fulfilled, the usual discounted cash flow method of valuation does not value the property rights "of the corporation." It values the underlying assets of the corporation plus the additional value that would accrue to the corporation *if* it had the contractual role of residual claimant throughout the projected future time periods.

A Normative Theory of Property

The Principle of Responsibility

The laissez-faire or market mechanism of appropriation leaves the negative product where it has fallen and assigns, as it were, the positive product to the same party. Thus the last legal owner of the inputs appropriates the whole product under the normal operation of the market without state intervention, e.g., without holding a trial to assign legal responsibility for damages. That is the answer to the descriptive question of how does the market initiate and terminate property rights. The corresponding normative question is the question of "Who should appropriate the whole product?". To whom should the legal liabilities and assets created in production be assigned? What is the normative principle that specifies who should be assigned the legal responsibility for the used-up inputs and produced outputs?

To see the underlying juridical principle, let us see how the assignments are made in an explicit civil or criminal trial. The standard principle for the assignment of legal or *de jure* responsibility can be easily seen in a civil trial to assign legal liability for damages to someone's property. The standard principle is to assign the legal or *de jure* responsibility for the damages to the party who was in fact responsible (i.e., *de facto* responsible) for the damages. The purpose of the trial is to ascertain if the defendant was in fact responsible for causing the damages (e.g., if the defendant knowingly caused the damages by his or her intentional actions). There are, of course, many shades and degrees of factual responsibility and there may be mitigating and extenuating

circumstances in any given case. But the basic principle is clear—to assign legal liability to the *de facto* responsible party (if any)—and that is the natural principle of responsibility which is investigated here.

The principle is clear to see in a trial for damages but there is no reason for the basic principle to change when property is consumed, used up, or otherwise destroyed in the absence of a trial. Moreover, the same principle would consistently apply to the opposite cases where property is created or produced. That is, the legal responsibility for and thus the legal ownership of produced property should be assigned or imputed to the party (if any) who was in fact responsible for producing the property. Thus there is a simple and basic juridical principle that will be taken as the basis for the normative theory of property appropriation investigated here:⁹

Principle of Responsibility:

Assign *de jure* responsibility in accordance with *de facto* responsibility.

This is a clear principle within the domain of intentional human actions, but that domain is far from universal. The principle gives only limited help in the domain of accidents, and it gives no help whatsoever in the assignation of legal responsibility for the property that is created or destroyed solely by natural forces. As the domain of the responsibility principle recedes, other non-responsibility-based principles of an economic or contractarian nature might be applied to the assignment of property rights. For our purposes here, our attention can be restricted to the results knowingly produced by intentional human actions—where the responsibility principle can be clearly applied. This is because our topic is theories of the firm, and the human activity of production is perhaps the epitome of planned, deliberate, and intentional human actions.

Only persons can be *de facto* responsible for anything. Things can bear no responsibility. Responsibility is imputed back through things to their human users. Neoclassical economists are fond of interpreting the causal efficacy of nonlabor inputs in an animistic way as a type of "economic responsibility" [Wieser 1930, 76] but that is only a metaphor. Knives have a certain efficacy or productivity but they have no *de facto* responsibility for the crimes committed with them. The *de facto* responsibility for the intended results of deliberate human actions using various instruments is borne solely by the human users, and it includes the responsibility for using up the services of the instruments.

The judge ... who, in his narrowly-defined task, is only concerned with the *legal imputation*, confines himself to the discovery of the legally responsible factor,—that person, in fact, who is threatened with the legal punishment. On him will rightly be laid the whole burden of the consequences, although he could never by himself alone—without instruments and all the other conditions—have committed the crime. The imputation takes for granted physical causality....

⁹ In the words of a law professor, "the libertarian entitlement thesis, to the effect that persons are entitled to retain the fruits of their labor, and the libertarian thesis about outcome-responsibility, to the effect that persons are responsible for the harms that they cause, are two sides of the same coin. ... The basis of this unity is the idea that people 'own' the effects, both good and bad, that causally flow from their actions." [Perry 1997, 352]

If it is the moral imputation that is in question, then certainly no one but the labourer could be named. Land and capital have no merit that they bring forth fruit; they are dead tools in the hand of man; and the man is responsible for the use he makes of them. [Wieser 1930, 76-79]

Thus even as Wieser introduces metaphorical notions of "economic responsibility" and "imputation" in his treatment of marginal productivity theory, he recognizes that for the ordinary non-metaphorical notion of imputation, "no one but the labourer could be named" and that the "imputation takes for granted physical causality."¹⁰

Application to Appropriation of the Whole Product

It is this principle of responsibility from jurisprudence that is being applied to the normative question of who should legally appropriate the whole product. The (stylized) facts are taken to be that in a given economic enterprise, the people working in the enterprise (managers and workers) cooperate together to use up the inputs in the process of producing the outputs. The people working in the given enterprise will be referred to as "Labor." In our simple canonical example, Labor, by performing the intentional human actions L, uses up the nonlabor or capital inputs K in order to produce the outputs Q. It is no accident. The using-up of the inputs K and the production of the outputs Q are the deliberate and intentional results of the actions L of the managerial and non-managerial workers in the enterprise. Thus the people working in the productive opportunity are jointly *de facto* responsible for producing the property vector (Q,-K,0). I have employed the convention used in economics of reifying the human activity of producing (Q,-K,0) as the labor L which must then be seen as being both produced and used up in the production process. Thus Labor's production of Q by using up K is represented as the production of L and then as the using up of L and K in the production of Q. In vectorial terms,

$$\text{Labor's Product} = (Q,-K,0) = (0,0,L) + (Q,-K,-L) = \text{Labor Services} + \text{Whole Product}.$$

This set of facts coupled with the principle of responsibility yields the assignment of the legal responsibility for Labor's Product (labor services plus whole product) to Labor. Thus Labor should, by the principle of responsibility, legally appropriate the whole product (in addition to the labor services). In short, the people working in an enterprise should "be the firm" (in the sense of whole product appropriator or residual claimant). The principle of responsibility implies that production should be legally organized as what are called "democratic firms" or "labor-managed firms" where the human capital suppliers are the residual claimants.¹¹

¹⁰ Wieser's development of economic notions of "responsibility" and "imputation" illustrates an important intellectual strategy of the Economics profession. How is Economics to protect itself against the "nightmare" of being invaded by Jurisprudence or Political Theory and from having some "economic" question addressed by juridical or political principles [e.g., as in this paper] outside the professional expertise of economists? Offense might be the best defense, and thus there have been "economic" theories of law, politics, and much else. These intellectual forays might involve developing "economic" versions of non-economic concepts (e.g., Wieser's metaphors) and then redefining the important questions as the questions that could be dealt with using economics concepts (e.g., ignoring questions of property appropriation in production in favor of wage and price determination by marginal productivity theory).

¹¹ This result that Labor should appropriate the whole product does not imply that present labor should "appropriate" the capital asset being used, which in the example yields the stream K, K, ..., K of capital services.

This is a very striking result. Yet it is surprisingly robust. The principle of responsibility is clear, for example, in criminal and civil trials, and there seems to be no reason why the same principle should not apply when no civil or criminal wrongs have been committed. There is much controversy about the borderline cases of responsibility (e.g., impaired capacity and insanity), but the principle has only been applied in the case of productive work which epitomizes deliberate and intentional human actions.

Brief Intellectual History of Responsibility Theory of Appropriation

The normative theory of property appropriation based on the responsibility principle is not new; it represents a reworking and reformulation in a modern and consistent form of what was variously called the "natural rights theory of property" [e.g., in Schlatter 1951] or the "labor theory of property." The intellectual history of these ideas will be reviewed by considering the main ways in which the classical ideas needed to be changed or reformulated to arrive at the modern theory:¹²

- ▶ expanding the site of appropriation from some Lockean "original state of nature" to any human activity where property is produced or consumed,¹³
- ▶ including the negative product (liabilities for the used-up inputs) in the concept of the "whole product" so that the question of appropriation could be posed in an algebraically symmetric (plus and minus) manner,¹⁴
- ▶ identifying "responsibility" as the unique characteristic of actions of persons in contrast with the causally efficacious but "non-responsible" services of things,¹⁵

¹² See Ellerman (1992) for a more complete treatment.

¹³ Any discussion of the appropriation or initiation of property rights is ordinarily relegated to a rather mythical original state of nature [e.g., in the philosophical literature] or to a situation where property previously held in common is being privatized. For instance, Harold Demsetz [1967] considers how private property in land with fur-bearing animals was established as a result of growth in the fur trade. John Umbeck [1981] considers how gold rights were established in the 1848 California gold rush on land recently ceded from Mexico. Yoram Barzel [1989] considers how the common property rights to minerals under the North Sea were privatized. But in Barzel's book [see particularly Chapter 5 "The formation of rights", 1989] as elsewhere in the economics of property rights literature, there is no recognition that the appropriation of the outputs (and the symmetrical termination of rights to the used up inputs) takes place in normal production. Thus the question of appropriation at the heart of the theory of the firm is not even posed in the "economics" literature on property rights and the firm. This illustrates our opening remark that in some fields it is the questions that are difficult. Once the question of appropriation is asked, the descriptive answer of the market mechanism of appropriation and the normative answer of the responsibility principle are relatively straightforward.

¹⁴ Classical treatments of the labor theory of property [e.g., see Menger 1899] tended to assert "Labour's Claim to the Whole Product" without being clear about the inclusion of the negative product. This view of "immaculate appropriation" led to much easy criticism of the theory as having neglected the other scarce inputs. The algebraically symmetric description of production (using a vector with the outputs as positive and the inputs as negative) came into common usage in recent decades as production opportunities came to be described with production sets rather than production functions. Applying the old label of "whole product" to these production vectors allows the modern and consistent reformulation of "Labour's Claim to the Whole Product." It is perhaps ironic that the usual treatment of marginal productivity theory also indulges in the notion of "immaculate" production. A unit of an input cannot produce its "marginal product" *ex nihilo*. Other inputs need to be used up. Marginal productivity theory can be reformulated using the vectorial "marginal whole product of a factor" so that the market value of the marginal whole product of a factor equals the price of the factor when profits are maximized. See Chapter 5 "Are Marginal Products Created *ex Nihilo*?" in Ellerman [1995].

- ▶ identifying the basic normative principle of the "labor theory of property" with the natural principle of responsibility ("Assign *de jure* responsibility in accordance with *de facto* responsibility"),¹⁶
- ▶ decisively separating the responsibility theory of appropriation from the hopelessly erroneous "labor theory of value"¹⁷ and
- ▶ integrating the responsibility principle with the theory of inalienable rights that descends from the Reformation and the Enlightenment (based on the inalienability of *de facto* responsibility) so that the problem can be located not in the market mechanism of appropriation but in the contract for the sale of human labor (the employment contract for the hiring or renting of persons).
- ▶ The "fundamental theorem of property theory" shows that under certain assumptions, if all transfers between parties are covered by contracts (no externalities) and all contracts are fulfilled by transfers (the condition violated by the sale contract for non-transferable labor), then the market mechanism of appropriation will satisfy the responsibility principle.

I turn now to the theory of inalienability which accounts for the distinctive treatment of contracts for the alienation of human capital.

***De facto* Inalienability of Human Action**

It might be argued that one can "transfer" the responsibility for the results of one's actions so the employees in an enterprise, having "transferred their labor," are not *de facto* responsible for the positive and negative results of their actions. Only the employer is *de facto* responsible, according to this argument, so the legal or *de jure* responsibility should be assigned solely to the employer. But this argument confuses *de jure* and *de facto* responsibility. Under the legal institution of the employer-employee relationship, legal or *de jure* responsibility is indeed

¹⁵ Even as the Austrian economist Friedrich von Wieser introduced the metaphorical notions of "economic responsibility" and "imputation," he showed an understanding of the non-metaphorical notions in jurisprudence. But the metaphorical notions of responsibility and imputation have captured the minds of economists and the minds of those who see the world through the economics mind-set. For example, the reader might try to find a single economics text written in, say, the last half century [e.g., Samuelson's primer and its vast progeny] that shows even Wieser's appreciation of the non-metaphorical notions of responsibility and imputation in the text's treatment of marginal productivity theory or the "labor theory of value." Thus one has the common picture where all the factors of production—land, labor, and capital—are seen as active agents cooperating together to produce the product. Alternatively, all the factors are seen as being passive inputs that are "used up" as the output is "produced" in an engineering description of production. The economics mind-set avoids the "non-economic" asymmetry of treating the responsible actions of persons as being fundamentally different from the non-responsible services of things.

¹⁶ Since the responsibility principle is fundamental to ordinary "bourgeois" jurisprudence, this interpretation of labor theory of property removed any bizarre or "radical" connotations of the theory and made it understandable to the layperson. Moreover, this interpretation completes the decoupling of the principles of private property from the conventional firm (based on the employment relation)—a decoupling begun by the understanding of the fundamental "ownership of the firm" myth.

¹⁷ The labor theory of value, particularly in its Marxian form, is surely one of the most spectacular failures in the history of economic thought. Once the labor theory of property is cleanly formulated as a theory of property appropriation, it is seen to have nothing whatever to do with value or prices. There is always a strong temptation to try to attack the labor theory of property by associating it with the labor theory of value, Marxism, and all that—an attack that is particularly ironic since the responsibility principle is the basis for the just appropriation of private property.

transferred from the employees to the employer. The normative principle of responsibility states that *de jure* responsibility should be assigned in accordance with *de facto* responsibility so the question is whether or not *de facto* responsibility is transferred from the employees to the employer. If not, then there is a conflict between the principle of responsibility and the employer-employee relationship (the legal institution for the renting or hiring of people).

This question can be illuminated by considering the parable of the criminous employee. Suppose that an entrepreneur hires a van for a week from its owner in an impersonal market transaction. The van-owner is not otherwise involved with the entrepreneur. The entrepreneur also hires a worker as his assistant. In addition to employing the van and the worker in normal business, the entrepreneur employs them to rob a bank. The employer and employee are caught and hauled before a judge. The employee claims that his position is quite analogous to that of the van-owner. In both cases, certain services (man-days or van-days) were sold to the entrepreneur, and the later use of those services by the entrepreneur are not the responsibility of the original seller of the services. The entrepreneur telling the employee to do this or that is like the entrepreneur "telling a grocer to sell [him] this brand of tuna rather than that brand of bread" [Alchian and Demsetz 1972, 1994]. In either case, the grocer bears no responsibility for the subsequent use made of the tuna or bread.

The judge would no doubt be unimpressed by this argument. He would "pierce the veil" of the labor contract to point out the factual difference in the alienability of labor services on the one hand and the services of a van or any thing (such as tuna or bread) on the other hand. The use of the van could in fact be transferred from the owner to the entrepreneur so that the entrepreneur could use the van without the owner being involved. But it is factually impossible for a person to do the same with his or her own actions. At best the worker can only agree to co-operate with the entrepreneur, but then the worker shares the *de facto* responsibility for the results. Having established those facts, the judge would hold them both legally responsible for the robbery. The servant in work becomes the partner in crime.

It is sometimes thought that the worker is responsible because an employment contract involving a crime is null and void, but the logical order is the reverse. The employee is legally guilty because he knowingly committed a crime,¹⁸ not because of the bogus contract, and thus the employment contract must be set aside in order to view the worker as a co-venturer and to explicitly apply the responsibility principle. The fact that the van rental contract was not *per se* void (unless some personal involvement of the van owner could be demonstrated) hints at the deeper contradiction between the employment contract and the responsibility principle.

The parable of the criminous employee illustrates the non-transferability of *de facto* responsibility for human actions. Yet the facts of the matter do not change when the actions are legal. Workers do not become some type of non-responsible instrument when they do not commit crimes. Thus the argument that workers have "transferred" their *de facto* responsibility fails. The previous conclusion that Labor is *de facto* responsible for the whole product is

¹⁸ "All who participate in a crime with a guilty intent are liable to punishment. A master and servant who so participate in a crime are liable criminally, not because they are master and servant, but because they jointly carried out a criminal venture and are both criminous." [Batt 1967, 612]

sustained, and thus the responsibility principle implies that the people who work in an enterprise should legally appropriate the positive and negative fruits of their labor. The de facto non-transferability of human labor implies that the contract for renting human beings (or renting human capital) is inherently null and void like the longer term self-sale contract. It is not a question of "buy or lease"; neither concept should be applied to persons. With the contract for renting persons recognized as being null and void (as the contract for buying persons is currently recognized), Labor would always have to hire capital and the market mechanism would correctly impute the whole product to Labor (as indicated in the fundamental theorem of property theory).¹⁹

The Approach to a Theory of the Firm from Democratic Theory

The Democratic Principle

There is another line of approach that leads to the same conclusion in favor of democratic firms, namely the approach from democratic theory [see Dahl 1985 for one development of this approach]. The approach to a theory of the firm from democratic theory needs to be outlined because the results dovetail with the property theoretic approach, the two approaches have a similar connection to inalienable rights theory, and the results will be useful in our later discussion of corporate governance.

The basic principle of democratic theory can be formulated in a way to emphasize the parallel with the responsibility principle:²⁰

Democratic Principle:

Assign *de jure* decision-making in accordance with *de facto* decision-making.

Humans have the actual capacity for free choice and self-determination, i.e., for *de facto* decision-making. The democratic principle states that in the institutional structures of decision-making for a group of human beings who need to make joint decisions, the *de jure* decision-

¹⁹ One way to develop this institutional solution was advocated by Robert S. Brookings [1929, 1932], the founder of the Brookings Institution:

to require that [interstate] corporations should reincorporate under a federal incorporation act; which act, while securing to capital a fair return at a fixed rate of interest and dividends, risk considered, would divide all additional profit or accretions in the form of labor shares between the employees (management and labor) in the ratio of their individual contribution, probably as recorded by their wage or salary compensation. [Brookings 1932, 17-18]

This reform would consist largely in the rental of capital by the workers and management, stabilizing a fair rental return for it while leaving the workers and management as their remuneration all the profits. [Brookings 1932, 73-74]

²⁰ The responsibility and democratic principles can also be presented using the unifying Kantian framework of treating persons as ends-in-themselves and never solely as a means. [see Chapter 4, "The Kantian Person/Thing Principle in Political Economy" in Ellerman 1995]

making rights should be assigned in accordance with *de facto* decision-making so that the group would thereby be self-determining.²¹

In a democratic decision-making structure for a group, each individual needs to unanimously agree to the basic or constitutional rules of decision-making or opt out of the group. By following the decision-making process according to those rules (e.g., rules of orderly debate and majority voting), the group is self-determining and self-governing. The alternative to democratic group decision-making is any system where *de jure* decisions are made for the given group by some other individual or group (which could be a subgroup and a distinct clique).

The Hidden Intellectual History of Non-democratic Liberal Thought

Consent versus Coercion: The Fundamental Issue According to Capitalist-Liberalism

The capitalist-liberal mind-set presents the basic issue as "consent versus coercion" and tends to picture non-democratic government as being inherently coercive.

Fundamentally, there are only two ways of co-ordinating the economic activities of millions. One is central direction involving the use of coercion—the technique of the army and of the modern totalitarian state. The other is voluntary co-operation of individuals—the technique of the market place. [Friedman 1962, 13]

Since capitalism (i.e., production based on the employment contract) and democracy are both based on consent, they are seen as economic and political correlates—in contrast with coercive systems of economic and political slavery. But this capitalist version of "liberalism"²² fundamentally misreads the intellectual history of capitalism and democracy.

The Pactum Subjectionis

The serious intellectual opposition to democracy came not from those advocating coercion but from those who saw non-democratic government as being based on an explicit or implicit²³ social contract that voluntarily alienated the right of government from the citizens to some monarch or sovereign. Such a non-democratic constitution was called a *pactum subjectionis*, a pact voluntarily subjugating the ruled to the ruler. It was not a delegation (*concessio*) of authority to a governor to rule in the name of the governed; it was an alienation (*translatio*) of power to the sovereign to rule in the sovereign's own name.

This dispute also reaches far back into the Middle Ages. It first took a strictly juristic form in the dispute ... as to the legal nature of the ancient "*translatio imperii*" from the Roman people to the Princes. One school explained this as a definitive and irrevocable alienation of power, the other as a mere concession of its use and exercise. ... On the one hand from the people's abdication the most

²¹ In the case of an individual (a group of one), this is essentially the principle of welfare economics that an individual's "welfare" should be identified with the individual's preference ordering. Then under any constraints, the "*de jure*" decision made according to "welfare" would be the *de facto* decision made by the individual.

²² As the opposite of liberty is servility, it might seem odd to use "liberalism" as the name of a social philosophy that fully accepts the "master-servant" relationship but it might just be evidence that such "capitalist liberals" see the world through the eyes of the employers.

²³ "Voluntary arrangements *are* contracts." [Easterbrook and Fischel 1990, 193]

absolute sovereignty of the prince might be deduced, On the other hand the assumption of a mere "*concessio imperii*" led to the doctrine of popular sovereignty. [Gierke 1966, 93-94]

By the Late Middle Ages, the view that "the legal title to all Rulership lies in the voluntary and contractual submission of the Ruled could ... be propounded as a philosophic axiom" [Gierke 1958, 39-40].

Perhaps Hobbes was the best-known theorist of the *pactum subjectionis* that was a

covenant of every man with every man, in such manner as if every man should say to every man, *I authorize and give up my right of governing myself to this man, or to this assembly of men, on this condition, that you give up your right to him and authorize all his actions in like manner.* [Hobbes 1958 (orig. 1651), 142]

Hobbesian autocracy and constitutional democracy are both based on the consent of the governed, so being based on consent is not the distinguishing feature of democracy. The real intellectual argument for democracy was not the platitudinous capitalist liberal case for consent as opposed to coercion but the theory of inalienable rights that argued for the democratic constitution ("to secure these rights") as opposed to the *pactum subjectionis* (which alienated those rights).

The Self-Sale Contract

The *pactum subjectionis* was seen as the social or collective version of the individual self-sale or self-enslavement contract.

A man may by his own act make himself the slave of any one: as appears by the Hebrew and the Roman law. Why then may not a people do the same, so as to transfer the whole Right of governing it to one or more persons? [Grotius (orig. 1625) reprinted in Morris 1959, 89].

It should be noted that the standard view of the slavery debate in terms of "consent versus coercion" is similarly over-simplified. As noted by Grotius, the voluntary self-enslavement contract was recognized in both Hebrew and Roman law, and the other two legal means of becoming a slave in Roman law, being born a slave or being taken a prisoner of war,²⁴ were interpreted in quasi-contractual terms. In the ante-bellum debates about American slavery, Reverend Samuel Seabury gave a sophisticated liberal defense of slavery in the Grotius-Hobbes tradition.

From all which it appears that, wherever slavery exists as a settled condition or institution of society, the bond which unites master and servant is of a moral nature; founded in *right*, not in *might*; Let the origin of the relation have been what it may, yet when once it can plead such prescription of time as to have received a fixed and determinate character, it must be assumed to be founded in the consent of the parties, and to be, to all intents and purposes, a compact or covenant, of the same kind with that which lies at the foundation of all human society. [Seabury 1969 (orig. 1861), 144]

²⁴ For a description of more recent markets in prisoners of war, see Frey and Buhofer [1986].

Many would reply that there was no actual contract involved in ante-bellum slavery, but Reverend Seabury anticipated that argument.

"Contract!" methinks I hear them exclaim; "look at the poor fugitive from his master's service! He bound by contract! A good joke, truly." But ask these same men what binds them to society? Are they slaves to their rulers? O no! They are bound together by the COMPACT on which society is founded. Very good; but did you ever sign this compact? Did your fathers every sign it? "No; it is a tacit and implied contract." [Seabury 1969, 153]

Nozick's Ultra-Capitalist Libertarianism

The capitalist-liberal tradition of allowing non-democratic forms of government based on the consent of the governed is brought up to date in the ultra-capitalist libertarianism of Harvard's Robert Nozick. Unlike Hobbes, Nozick does not espouse alienating the right of self-government to an absolute sovereign—but only that such an alienation should be permitted. Nozick's point is that the basic "framework should be fixed as voluntary" [Nozick 1974, p. 331]. People should be free to contract away the right of self-government to an authoritarian "dominant protective association" or to enter into a democratic protective association.

The comparable question about an individual is whether a free system will allow him to sell himself into slavery. I believe that it would. [Nozick 1974, 331]

The fact that Nozick is sometimes nevertheless considered an advocate of "inalienable rights" points out a serious ambiguity in the notion. An "inalienable" right is sometimes thought to be a right that may not be taken away from an individual without that person's consent, but that would only be a right as opposed to a privilege.²⁵ An *inalienable* right is a right that may not be alienated even with consent—and that is why inalienable rights theory carries one genuinely beyond the "consent versus coercion" framework of capitalist liberalism and ultra-capitalist libertarianism.²⁶

Brief Intellectual History of Inalienable Rights Theory

The Reformation Doctrine of Liberty of Conscience

The answer to the liberal contractarian arguments for allowing voluntary slavery and constitutional autocracy comes not in fussing about the reality of the contract or the quality of the consent. The answer lies in the inalienable rights theory that descended from the Reformation and the Enlightenment. To sketch this intellectual history, it is best to start with Martin Luther's

²⁵ "If rights were viewed as property, then inalienability might mean only that a man must consent to what is done with them." [Lynd 1968, 45]

²⁶ Just as an idealized model might better show the logic of a theory without complicating factors such as transactions costs [e.g., "Coase's Theorem"], so ultra-capitalist libertarianism might be seen as the idealized version of capitalist liberalism obtained by taking the limit as the complicating factor of "common sense" goes to zero. In this case, "common sense" is the contemporary norm that, contra Nozick, the *pactum subjectionis* and the lifetime labor contract are unthinkable [in spite of no serious capitalist-liberal case against them] while the self-rental contract exemplifies "freedom of contract." Arguments to rule out the self-sale contract without endangering the self-rental contract were criticized in my ironic "Nozickian" article penned as "Philmore" [1982] and reprinted as Chapter 3 of Ellerman [1995].

Reformation doctrine of the liberty of conscience. It is *de facto* impossible for a person to alienate his decision-making power to the Church on matters of faith.

Furthermore, every man is responsible for his own faith, and he must see it for himself that he believes rightly. As little as another can go to hell or heaven for me, so little can he believe or disbelieve for me; and as little as he can open or shut heaven or hell for me, so little can he drive me to faith or unbelief. [Luther 1942, 316]

Francis Hutcheson's Notion of Unalienable Rights

Francis Hutcheson, a teacher of Adam Smith, developed this inalienability argument as a part of the Scottish Enlightenment. Hutcheson is important for another reason. The American Declaration of Independence is one of the high points in the praxis of the inalienable rights tradition. The conventional scholarly view has been that "Jefferson copied Locke" [Becker 1958, 79]. But Locke had no serious theory of inalienability, and he in fact condoned a limited voluntary contract for slavery, which he nicely called "Drudgery." In his important study *Inventing America*, Garry Wills reinvented Jeffersonian scholarship concerning the intellectual roots of the Declaration of Independence. Wills convincingly argued that the Lockean influence was more indirect and even to some extent resisted by Jefferson, while Hutcheson's influence was central and pervasive. In particular, "Jefferson took his division of rights into alienable and unalienable from Hutcheson, who made the distinction popular and important." [Wills 1979, 213]

Hutcheson first distinguished between alienable and unalienable rights in *An Inquiry into the Original of Our Ideas of Beauty and Virtue* [1725]. The *de facto* inalienability argument is developed in Hutcheson's influential *A System of Moral Philosophy* [1755]. He followed Luther in showing how the "right of private judgment" or "liberty of conscience" was inalienable. He focused on the *factual* non-transferability of private decision-making power. As in the case of the hired criminal, the employee ultimately makes the decisions himself in spite of what is commanded by the employer. Short of physical coercion, an individual's faculty of judgment cannot in fact be short-circuited by a secular or religious authority.

A like natural right every intelligent being has about his own opinions, speculative or practical, to judge according to the evidence that appears to him. This right appears from the very constitution of the rational mind which can assent or dissent solely according to the evidence presented, and naturally desires knowledge. The same considerations shew this right to be unalienable: it cannot be subjected to the will of another: tho' where there is a previous judgment formed concerning the superior wisdom of another, or his infallibility, the opinion of this other, to a weak mind, may become sufficient evidence. [Hutcheson 1755, 295]

This inalienable-rights doctrine, based on the *de facto* inalienability of a person's capacity for thought and action, developed into the Enlightenment critique of the contract to sell all of one's labor at once (the voluntary self-enslavement contract) and of the Hobbesian *pactum subjectionis*. If a person's *de facto* responsibility and decision-making capacity could not

actually be alienated, then any contract to that effect was inherently null and void, and those rights should be legally recognized as being inalienable.

Richard Price's Inalienable Right of Self-Government

At the time of the American Revolution, Richard Price,²⁷ a Dissenting minister and mathematician from Wales, developed the implications for democratic theory of the Reformation doctrine of liberty of conscience in his 1776 tract *Observations on the Nature of Civil Liberty*.

Civil liberty is, in this respect, on the same footing with religious liberty. As no people can lawfully surrender their religious liberty by giving up their right of judging for themselves in religion, or by allowing any human beings to prescribe to them what faith they shall embrace, or what mode of worship they shall practise, so neither can any civil societies lawfully surrender their civil liberty by giving up to any extraneous jurisdiction their power of legislating for themselves and disposing their property. [reprinted in Peach 1979, 78-79]

Price's tract and his support for the American Revolution raised a furor of opposition so in 1777 he wrote *Additional Observations on the Nature and Value of Civil Liberty*. Again the different types of liberty were squarely grounded on

the general idea of self-government. The liberty of men as agents is that power of self-determination which all agents, as such, possess. Their liberty as moral agents is their power of self-government in their moral conduct. Their liberty as religious agents is their power of self-government in religion. And their liberty as members of communities associated for the purposes of civil government is their power of self-government in all their civil concerns. [reprinted in Peach 1979, 136]

As this notion of the inalienable right of self-government is based on the "power of self-determination which all agents, as such, possess," a person could not alienate it without ceasing to be a person. Thus the theory yielded the distinction between a "natural right" that could not be alienated without consent and an inalienable right that may not be alienated even with consent.²⁸

²⁷ Price was the most sophisticated in a small band of English radicals who applied democratic principles to support the American Revolution. Other members included Major John Cartwright, James Burgh, Catharine Macaulay, Joseph Priestley, and Granville Sharp (see Cone 1968, Lynd 1969, or Toohey 1978).

²⁸ Staughton Lynd has nicely captured these distinctions in his treatment of the intellectual roots of American democratic thought. [1969]

Then it turned out to make considerable difference whether one said slavery was wrong because every man has a natural right to the possession of his own body, or because every man has a natural right freely to determine his own destiny. The first kind of right was alienable: thus Locke neatly derived slavery from capture in war, whereby a man forfeited his labor to the conqueror who might lawfully have killed him; and thus Dred Scott was judged permanently to have given up his freedom. But the second kind of right, what Price called "that power of self-determination which all agents, as such, possess," was inalienable as long as man remained man. Like the mind's quest for religious truth from which it was derived, self-determination was not a claim to ownership which might be both acquired and surrendered, but an inextricable aspect of the activity of being human. [56-57]

Application of Democratic Theory to the Firm

I previously considered the argument that human action should be legally non-transferable (i.e., the employment contract should be recognized as null and void) since *de facto* responsibility cannot actually be transferred from one person to another. This factual non-transferability is clearly recognized in the case of the criminous employee, and human nature does not suddenly change when the actions are not criminous. We have now seen a different strand of thought that reaches a similar conclusion based on the non-transferability of human decision-making. Just as one cannot transfer responsibility to another but can only agree to co-operate with another, so one cannot transfer decision-making capacity to another but can only agree to make one's own decision according to the recommendation of another. The basic idea was captured in Luther's colorful expression "As little as another can go to hell or heaven for me, so little can he believe or disbelieve for me," so the theory of inalienable rights can be seen as the Reformation doctrine of liberty of conscience writ large.²⁹

Perhaps the most striking feature of this account of inalienability is that it is based on certain aspects of human nature that are independent of duration and sphere of life. The *de facto* inalienability of responsibility is as true for eight hours or eight minutes as it is for eight decades or a lifetime. That is, the inalienable rights critique of the self-sale contract—the contract that sells labor by the lifetime or up to some given retirement age—applies equally well to the self-rental contract which sells labor by the hour, day, month, or year. The *de facto* inalienability of human action is independent of the duration.

The *de facto* inalienability of human decision-making capacity is also independent of the sphere of life. It applies to the "private sphere" as to the "public sphere"—to the firm, the family, or any other human organization as well as to the state. We have seen that there are two opposite ways that government can be based on the consent of the governed: a *pactum subjectionis* which transfers the right of government to some sovereign and a democratic constitution which secures the right of self-government by only delegating authority to governors to govern in the name of the governed.

Which kind of contract is the consensual basis for the management of the people who work in a firm? The contract is the employment contract, and a moment's thought shows that the employees do not delegate the right of management to the employer to manage in the name of employees. It is a transfer or alienation of the management rights to the employer to manage in the employer's own interests. Thus the employment contract is the *pactum subjectionis* of the

Lynd also traces these ideas back to the central affirmation of the Reformation that "no one can believe for another" [quoted from Ernst Cassirer in Lynd 1969, 34]. The *de facto* responsibility for one's beliefs cannot be alienated to a religious master, and the same holds for one's actions vis-à-vis a secular master (as seen from the case of the criminous employee). Thus the inalienability-of-conscience idea carried over to human action and produced the inalienability critique of the employment contract.

²⁹ "To what quarter in the large historic firmament can we turn our eyes with such certainty of being stirred and elevated, of thinking better of human life and the worth of those who have been most deeply penetrated by its seriousness, as to the annals of the intrepid spirits whom the protestant doctrine of indefeasible personal responsibility brought to the front in Germany in the sixteenth century, and in England and Scotland in the seventeenth?" [Morley 1949 (1874), 103]

workplace. But the capacity for decision-making does not suddenly become *de facto* transferable when John Q. Public goes to work. Deciding to make a widget (like deciding to rob a bank) because one is told to do so by one's boss is only another way of making one's own decision. Thus the argument based on the *de facto* non-transferability of decision-making, like the argument based on the *de facto* inalienability of responsibility, reaches the same conclusion that the voluntary contract for the renting of human beings (a.k.a. the employment contract, the employer-employee contract, the hired labor contract, or the master-servant contract) is inherently null and void. The *de jure* decision-making rights should be assigned to all those who ultimately and inextricably make the *de facto* decisions, i.e., to all those who work in the firm. Thus democratic theory reaches the same conclusion as the basic principle of responsibility in favor of the democratic firm.

Corporate Governance Applications

Review

I have outlined a descriptive property theoretic treatment of the firm as well as a normative theory of the firm from the approach of property theory and democratic theory. The descriptive theory leaves unanswered many, if not most, of the questions addressed in the economic theories of the firm. For instance, there was no theory about why some firms might function as an integrated unit instead of each worker on an assembly line being a separate firm. But a property theoretic description was constructed of the stocks and flows of property rights in each firm regardless of the degree of vertical integration.

The normative theory of the firm was approached from two angles, the responsibility theory of appropriation and democratic theory. Both approaches led to the same conclusion of the democratic firm where the members of the firm are those who work in the firm. Both approaches also found fatal flaws in the contract for the renting of human beings which fictitiously pretends that responsibility and decision-making can be *de facto* transferred from one person to another. That contract is the rental version of the self-sale contract and the private version of the public *pactum subjectionis*—both of which are already recognized in contemporary norms as being null and void. Indeed, the inalienable rights theory descending from the Reformation and Enlightenment that rules out the self-sale contract and the *pactum subjectionis* applies equally well to the employment contract. The results about the firm and the contracts fit together in the sense that without the employment contract, Labor would always be hiring capital so the market imputation of the whole product would go to Labor, i.e., the firm would be a democratic or labor-managed firm.

Rights-based Constraints and Efficiency Arguments

Rights as Trumps

These arguments are all rights-based arguments that trump utilitarian or efficiency-based considerations. For instance, inalienable rights theory provides the explanation, *inter alia*, of why a citizen's voting rights may not be sold—in spite of there being willing buyers and sellers to make it a Pareto improvement. Inalienable rights theory also rules out the self-sale contract

which historically also found willing buyers and sellers.³⁰ These constraints are already recognized in economic model-building (e.g., in the human capital literature). Our results show that the self-rental contract should similarly be ruled out—in spite of there being willing buyers and sellers of labor. In the same way that the joint work of the criminous employer and employee is legally reconstructed as a "partnership", so should the joint work of all who work in each productive opportunity be legally reconstructed as a "partnership" or democratic firm. An appropriate corporate legal form needs to be developed to legally implement the right of the people who work in a firm to jointly appropriate the positive and negative fruits of their joint labor and to democratically self-manage their worklives.³¹

Rights Conclusions from Efficiency Arguments?

The use of a rights-based argument to trump or "constrain" efficiency arguments is a question of normative theory. There is also a methodological problem in many efficiency arguments that leads to empirical questions. The law and economics literature is full of arguments that attempt to draw conclusions about the allocation or structure of rights based on "economic" arguments. Such arguments commit a type of category mistake in trying to draw rights conclusions from efficiency arguments. It might always be empirically possible to simulate the efficiency effects under a variety of rights structures.³² In general, it will take a theory of rights (a rights-based argument) to derive a conclusion about rights and such a theory will go beyond "Economics" narrowly defined.

For instance, one cannot derive a rights-based condemnation of slavery based on, say, a demonstration of its inefficiency relative to non-slave labor. It might always be possible to reorganize slave labor to simulate, say, the incentive effects of free labor so that the sought-for efficiency might be obtained under slavery. In a similar manner, a conclusion in favor of the right of democratic self-management in the workplace cannot be derived from any demonstration of the relative efficiency of self-managing workers over hired workers. It might always be possible to reorganize the hired labor firm using some new management fad to simulate self-managed or democratic workplaces so that the higher efficiency could also be obtained in the hired labor firm. It might be argued that residual claimancy would have a beneficial incentive effect on workers, but the same incentive effects might be obtained with profit-related pay in a hired labor firm. The same caveat would apply to efficiency arguments against democratic firms in favor of hired labor firms [see below on Hansmann]. It is difficult to see how one could ever show that such empirical rearrangements were impossible, and thus it does not seem possible to

³⁰ In the American South before the Civil War, a number of voluntary contractual enslavements were secured by the passage of private bills in the state legislatures. For example, in 1858 the North Carolina legislature passed "A Bill for the Relief of Emily Hooper of Liberia," which provided "That Emily Hooper a negro, and a citizen of Liberia, be and she is hereby permitted, voluntarily, to return into a state of slavery, as the slave of her former owner, Miss Sally Mallet of Chapel Hill...." [quoted in Franklin 1969, 219]. In the decade before the Civil War, general legislation was passed in six states "to permit a free Negro to become a slave voluntarily" [Gray 1958, 527]. For instance in Louisiana, legislation was passed in 1859 "which would enable free persons of color to voluntarily select masters and become slaves for life" [Sterkx 1972, 149].

³¹ See Ellerman 1990 for an initial effort along these lines.

³² For instance, Holmstrom and Tirole note that "[f]or an unexplained reason both Jensen and Meckling [1976], as well as Grossman and Hart [1982], assume that the only way to influence the manager is via changes in capital structure" [1989, 81]—as if managers could not be influenced by changing the contractual incentives within the given capital structure.

rigorously draw conclusions for or against a certain rights structure from efficiency arguments. With respect to rights, an efficiency argument is like a double-edged sword that is dull on both edges.

In summary, I have argued for a double "disconnect" between rights-based arguments and utilitarian considerations, one normative and the other methodological/empirical. Normatively rights arguments trump utilitarian considerations, and methodologically it seems well-nigh impossible to rigorously support or condemn a rights structure by an efficiency argument since it might always be possible to simulate the efficiency effects under a variety of rights structures.

Conceptual Entry Points in the Corporate Governance Debate

Much of the corporate governance debate starts with a corporation as given. Yet from the approach outlined here, that is somewhat like conducting a debate about slavery by taking the slave plantation as a given. It is necessary to consider more basic matters than the ambiguities in the governance of large corporations at the end of the twentieth century. The assumption of the conventional debate is that all the forms under consideration are within the normative side-constraints provided by basic human rights (which, for example, is why under contemporary norms the sale of human capital is not considered). But our argument has been that those basic side-constraints are much stronger than is conventionally assumed today and that, in particular, they rule out the whole legal relationship for the renting of human beings (employment contract). Human capital should be neither sold nor *rented*. The people in the firm should always be legally "inside" the firm, i.e., the legal members of the firm. That has direct implications for the nature of the corporation and the various contemporary theories about shareholders, stakeholders, the "nexus of contracts," and so forth.

For a strictly logical viewpoint, the arguments presented here find no flaw in the conventional corporation so long as it has no employees (an "unstaffed" company that just relends or leaves idle its capital)—just as the case against slavery provides no critique of a "slave plantation" so long as it has no slaves. But as was pointed out by Coase in his classic article on the nature of the firm [1937 or 1988], the "legal relationship normally called that of 'master and servant' or 'employer and employee'" [1988, 53] provides the best approximation to the firm in the real world. Thus one may assume that the employment relation is an essential part of the contemporary corporation and that a corporation is not established just to relend or leave idle the shareholders' capital. The abolition of the employment relation could then be conceptually approached as changing the nature of the corporation to redefine the members of the corporation to be the people who work in it. In this manner, the arguments presented here provide a conceptual entry point into the corporate governance debate.

What Do Bosses Do? Bosses Stop the War of All Against All

Neo-Hobbesian Theories of the Firm

Thomas Hobbes saw man as a rather cantankerous and quarrelsome creature. Without an overarching power to hold man in awe, there would be constant strife, quarrels, and fights; life would be nasty, short, and brutish. To prevent this state of unceasing war of all against all, people should enter into the Hobbesian *pactum subjectionis* to alienate and transfer their rights of government to a sovereign (a monarch or committee of oligarchs).

Hobbes' argument points out the high "transactions costs" of not having a strong central power. Certainly autocracy rather than democracy has been the norm through most of human history. He jumps to a rights-based conclusion that the structure of a constitutional autocracy is necessary to establish a low transactions cost social order. While that may be sufficient, history has also shown it is not necessary. Social order can be established and maintained without alienating the rights of government to an autocracy or oligarchy. Moreover, the "contra-Hobbes" theory of inalienable rights normatively rules out the Hobbesian contract in favor of a democratic constitution.

Hansmann, Madison, and the Costs of Collective Decision-Making

Henry Hansmann [1990, 1996] has developed a "soft" neo-Hobbesian theory which argues that participatory or democratic firms are usually associated with homogeneous preferences and skills in certain production or service firms (e.g., plywood cooperatives in the Pacific Northwest or professional partnerships) which would have lower organizational and decision-making costs. In more complicated settings, skills and preferences are quite heterogeneous across different groups working in the firm so workers might be factious and quarrelsome. Democratic or participatory forms of decision-making would then be deselected in the market's search for least cost solutions. Alchian and Demsetz earlier developed a "hard" neo-Hobbesian theory [1972] which argued for a "sovereign" monitor on the basis of the costs of shirking by workers in team production situations.

The neo-Hobbesian theories seem to have a certain plausibility. For instance, democracy will have a much better chance in homogeneous Slovenia than in heterogeneous Bosnia. But few serious advocates of democracy would argue that it was always the minimum cost solution for collective decision-making. Since political democracy is now recognized as being based on rights, it is not concluded that heterogeneous societies should be governed undemocratically. And the basic rights of self-determination and their inalienability—which answered Hobbes in the political sphere—do not suddenly evaporate in the economic sphere or the workplace. Thus the soft or hard neo-Hobbesian approach fails in its initial assumption that the question of workplace democracy is a question of expediency.

The problem of heterogeneity in collective decision-making is hardly a new topic. It is instructive to consider the treatment of this problem in American political thought where the *locus classicus* is James Madison's *Federalist Paper No. 10* on the "mischiefs of faction."

The instability, injustice and confusion introduced into the public councils, have in truth been the mortal diseases under which popular governments have every where perished; as they continue to be the favorite and fruitful topics from which the adversaries to liberty derive their most specious declamations.

Madison proceeds in a logical fashion to lay out the "two methods of curing the mischiefs of faction: the one, by removing its causes; the other, by controlling its effects." Again there are two way to remove the causes of faction: "destroying the liberty which is essential to its existence" or giving all the citizens homogeneous opinions, passions, and interests. The attempt to render all citizens homogeneous would require totalitarian methods, would probably not

succeed anyway, and thus would hardly qualify as a way to improve republican government. Madison also rejects the destruction of liberty as a means of removing the effects of faction. "Liberty is to faction, what air is to fire" but it would be folly to abolish liberty for that reason as it would be to annihilate the air we breathe as a fire prevention measure.

Thus Madison rejects both methods for removing the causes of faction and thus logically proceeds to consider various ways to mitigate the effects of faction.³³ Hansmann (who does not mention Madison in 1990 or 1996) and the neo-Hobbsians do not follow Madison in considering ways to lessen the "mischiefs of faction" and to thus lower the social costs of democratic decision-making. They pursue these "favorite and fruitful topics" to the end rejected by Madison—removing the causes of faction by "destroying the liberty" of democratic decision-making in favor of the employment relation.

The Japanese Human-Capital-ist Firm

On the empirical side, the neo-Hobbesian arguments also tend to overestimate the efficiency of the employment relation and to underestimate the flexibility and efficiency of more participative and democratic structures. One interesting example is the large Japanese company which certainly involves all the complications of modern production but which maintains a participative structure at least on the shopfloor. The cross-ownership of the companies in a *keiretsu* together with the blanket proxies given to each company by its *keiretsu* partners defeats the traditional shareholder role so that the corporate culture can "redefine" the long-term insiders (the "human-capital-ists") as the "owners" or principal stakeholders. Thus the large Japanese company could be viewed as an example of insider sovereignty even though the workers do not have significant ownership of the corporate shares. The Japanese firms show empirically that participative decision-making can be organized in quite an efficient manner that does not price these firms out of the market. The success of the greenfield Japanese transplants in the U.S. shows that the success is not entirely due to idiosyncrasies of Japanese culture [see Kenney and Florida 1993].

The Nexus of Contracts Theory

Dissolving the Firm into the Nexus of Contracts

The basic corporate governance question of who should be the members ("owners") of the corporation is sometimes avoided by picturing the corporation as "only a nexus of contracts." The corporation is conceptually dissolved into the nexus of all the contracts with creditors, suppliers, employees, customers, and shareholders.

Each factor in a firm is owned by somebody. The firm is just the set of contracts covering the way inputs are joined to create outputs and the way the receipts from the outputs are shared among inputs. In this 'nexus of contracts' perspective, ownership of the firm is an irrelevant concept. [Fama 1996, 304]

³³ See Ranney [1975] and the references cited therein for some of the voluminous literature growing out of Madison's warnings about the effects of heterogeneous opinions, passions, and interests.

From an efficiency viewpoint, the important thing is (supposedly) that the participants know the relative risks of their contracts and that the contractual framework be stable and not vulnerable to opportunistic behavior by managers, shareholders, or other contracting parties.

Some writers interpret this theory as merely holding that the corporation is a "nexus" in the sense of being the "common signatory" [Hansmann 1996, 18] of the contracts with creditors, suppliers, employees, and customers. However, that observation does not capture the idea to somehow dissolve the firm into the nexus of contracts leaving only the contracts as the objects of analysis so that the "ownership of the firm is an irrelevant concept."

This is the set of contracts theory of the firm. The firm is viewed as nothing more than a set of contracts. One of the contract claims is a residual claim (equity) on the firm's assets and cash flows. [Ross and Westerfield 1988, 14]

Equity is only another contractual claim.

Others authors criticize economic theories of the "agency contract"—as well as the "nexus of contracts" view—by noting that the relationship between the corporate managers and the far-flung shareholders has few of the characteristics of an actual contract [e.g., Clark 1985 and Brudney 1985]. It is descriptively inaccurate to present the corporate governance arrangements in large companies as the outcome of knowledgeable bargaining between contractual parties.

And, ideologically, the contract analysis' assumption that each of the parties is a knowledgeable consenting participant offers legitimacy for the very condition of corporate management that Berle and Means deplored a half century ago—considerable power with little accountability. [Brudney 1985, 1444]

Property Theoretic Analysis of the "Nexus of Contracts"

I will take the different tact of using descriptive property theory to analyze the attempt to use the nexus of contracts to "dissolve" the firm. While financial economists may only see that "the receipts from the outputs are shared among inputs" according to the contracts, the underlying structure of property rights is quite different.³⁴ The "nexus of contracts" metaphor seems to be the latest version of a common set of metaphorical misunderstandings of property rights which might be called the "liabilities cancellation" metaphors. The liabilities cancellation metaphor can be used for stocks of property rights (balance sheets) or flows of property rights (income statements or cashflow statements).

Let us start with a balance sheet application. An individual owns five apples and owes someone else three oranges (say, a prepaying customer for the oranges). If the prices are \$1 and \$1.30 respectively, then the net worth of the property holdings is $\$5 - \$3.90 = \$1.10$. This situation may be metaphorically misrepresented by saying that the \$5 of assets is partly owned by the orange customer (\$3.90 worth) while the remainder of \$1.10 is owned by the "residual net-asset owner." The individual's property holdings of five apples are metaphorically dissolved into a "nexus of claims" with the individual being reduced to only one of the claimants (the residual

³⁴ For a detailed description of the stocks and flows of property rights in a firm using the mathematical machinery of double-entry bookkeeping, see Ellerman [1982] or Chapter 6 in [1995].

one). While the $\$5 - \$3.90 = \$1.10$ calculation can be performed at the value level, liabilities cannot be canceled at the quantity level.³⁵ One cannot subtract oranges from apples any more than one can add them. The so-called "residual" or "net-asset" owner actually owns the full five apples and also holds a liability of three oranges.

The liabilities cancellation metaphor is also applied to flows of property rights. Using our previous example, the firm is the legal party that appropriates the whole product (Q,-K,-L) in a given time period. If p, r, and w are the unit market prices of outputs, capital services, and labor services respectively, then the value of the whole product is the profit $\pi = pQ - rK - wL$. The firm as a "nexus of contracts" is then viewed as allocating the "receipts from the outputs" pQ between the contractual claimants: the capital suppliers who receive rK, the labor suppliers who receive wL, and the residual claimants who receive π . Here again, the value cancellations misrepresent the actual property rights. Contrary to the metaphorical picture that "[e]ach factor in a firm is owned by somebody," the firm is not a "coalition" of resource owners who then have claims on portions of the outputs. The firm buys or already owns all of the inputs K and L used up in production and thus appropriates the liabilities -K and -L as well as the outputs Q, i.e., all of the whole product. Instead of a metaphorical picture of symmetry between various contractual claimants, there is complete asymmetry of property rights; the "residual claimant" claims not just the residual π but 100% of the whole product (Q,-K,-L) which includes the liabilities to the factor suppliers. The attempt to make the corporation disappear into "only a nexus of contracts" was only legerdemain with metaphors. The question remains of who are to be the "owners" or members of the company on the firm-side of all the contracts, the company that appropriates 100% of the whole product (Q,-K,-L).

Shareholder Theory

Who are to be the Members of the Company?

The responsibility and democratic arguments presented here apply to all firms, incorporated or not, and to all corporations, not just to large companies with dispersed publicly traded shares (the "Berle-Means corporations"). I focus on the corporation as opposed to unincorporated legal forms simply because it is the prevalent form of business organization. Corporations as a general category would include various forms of cooperatives as well as the common share-based corporation. In all corporations, there is a certain class of "members" such as the agricultural producers in a producers co-op, workers in a worker co-op, customers in a consumers co-op, depositors in a mutual savings bank, policyholders in a mutual insurance company, and shareholders in a share-based corporation. In each case save one, the members need to qualify by playing a certain functional role of being a "patron." The (membership) shares are not alienable since the "buyer" might not have the qualifying role of being a patron (which would violate the intent to define membership based on patronage) and a patron would qualify for membership on that basis and would not need to "buy" membership. This accounts for the typical non-marketability of co-op membership shares but it is not a theory of inalienability since it does not justify the beginning assumption that the members are to be defined as a certain class of patrons.

³⁵ Economists who mind their P's and Q's would not attempt a cancellation such as: assets of five apples minus liabilities of three oranges equals net assets of "two fruit."

Given that structure, the limit can be taken as the patronage role goes to zero. With no qualifying role, anyone can own membership shares and they can be freely traded. Members become owners. That is the conventional share-based corporation.³⁶ Since the joint-stock company is the limiting case as the membership-qualifying role goes to zero, it is easily the most flexible and versatile corporate form and it is the form that is the focus of the corporate governance debate. But in all the cases, the corporation is in legal theory the limited liability corporate embodiment of the members—the corporate form that the members (in theory) use to carry out a certain business or venture. To consider the shareholder's role in a (share-based) corporation, one must differentiate functional roles. A shareholder may also be a manager but only the shareholder *qua* shareholder is considered here.

The Oxymoron of "Shareholders' Democracy"

There does not seem to be any serious argument that the absentee shareholders are *de facto* responsible for producing the whole product. That question is better not posed. There is however an attempt to portray actual shareholder control as being "shareholder democracy."

The analogy between state and corporation has been congenial to American lawmakers, legislative and judicial. The shareholders were the electorate, the directors the legislature, enacting general policies and committing them to the officers for execution. [Chayes 1966, 39]

Democracy is not a method of governing property. One does not ask if a farmer governs his livestock or fields democratically or not. It would similarly odd to conceive of a "corporate democracy" wherein shareholders actually "govern" their property. Democracy is a system of governing people. Moreover, suppose that the people in country A follow "democratic" procedures to elect a legislature or parliament whose business, however, is to pass the laws and select the ministers to govern a different country B. Is country B "democratically governed"? A system would not be considered "democratic" even though it went through "democratic procedures" to elect a "legislature" if it was lacking the most crucial ingredient of all, self-government.

Shareholder democracy, so-called, is misconceived because the shareholders are not the governed of the corporation whose consent must be sought. [Chayes 1966, 40]

The people who are governed or managed by the corporate managers are the people who work in the company, and the corporation exercises the governance or management rights over their work by virtue of the workplace *pactum subjectionis*, the employment contract. While it is often recognized that "shareholder democracy" is impractical in the large diffusely-held Berle-Means corporations, the corporate governance literature is relatively bereft of the simple observation

³⁶ Instead of presenting the conventional firm as the limit as the patronage role goes to zero, Hansmann [1990, 1996] oddly presents it as a capital-suppliers' cooperative. But that theory fails to account for the free alienability of those shares or the issuance of shares for other reasons (e.g., stock bonuses for managers and workers). In his treatment of Hart and Moore's so-called "property rights" approach, Hansmann [1996, 15 and 299] correctly notes that the shareholder's ownership can be logically separated from supplying capital assets—without noting the implications for his own theory of the conventional corporation as a capital-suppliers' cooperative. In any case in a world of co-ops, the conventional corporation could be conceptually reinvented by taking the limit as the patronage-qualification goes to zero.

that "shareholder democracy" would not be an example of self-government even if it was practical.³⁷ Moreover that observation holds for all corporations, not just the Berle-Means corporations that have been the focus of the corporate governance debate.

The Shareholders' Property Rights

While the shareholders' control rights cannot be based on democratic rights, isn't it just a matter of property rights? This question requires a distinction between two senses of control: the negative (or exclusionary) control rights to forbid another person's use of one's property and the positive (or discretionary) control rights to direct the other person's activity while using one's property. Only the negative control rights come from property ownership by itself—the right to exclude the other person from use of one's property. The positive or discretionary control rights over the other person's activity requires the ownership of that person's "time"—namely the employment contract.³⁸ The ownership of the property that the other person might be using is only a bargaining chip to get the person to agree to the employment contract.

Thus the rights of ownership in, say, land give one the right to make another person a trespasser who is using one's property (if that use did not have the owner's consent) but it does not automatically make the other person a servant or employee. The latter requires the employment contract. Since land can be rented out instead of people being rented in, the landlord is not automatically the "lord" of the land. This is a recent development. In medieval times, the authority of a king over his subjects was seen as part of his ultimate ownership of the land in the country. "Rulership and Ownership were blent" [Gierke 1958, 88]. Marx (incorrectly) thought the same idea carried over to capital in more modern times and thus he misleadingly gave the name "capitalism" to the system of production based on the employment contract.

It is not because he is a leader of industry that a man is a capitalist; on the contrary, he is a leader of industry because he is a capitalist. The leadership of industry is an attribute of capital, just as in feudal times the functions of general and judge were attributes of landed property. [Marx 1977, 450-451]

This idea that "rulership" is part of capital ownership has become a part of the standard understanding of the "ownership of the firm" in the "capitalist" system.

³⁷ Thus Hansmann counters the workplace democracy argument by finding investor democracy in an investor-owned firm and consumer democracy in a consumer-owned firm (consumer cooperative) because he defines "democracy" in terms of voting without noting that neither the investors nor the consumers are under the authority of elected management. Only their property is under that management in an investor-owned or consumer-owned firm, so one needs to pay some attention to which people are under the authority of the government to be voted upon before using the word "democracy."

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. [Hansmann 1996, 43]

In a similar vein one might say that the American Revolution enfranchised the Americans but also disenfranchised the English while continuing to deny the franchise to the French to elect the government of the Americans. Exactly.

³⁸ An employment contract is not needed if the person using the property is the owner but I am considering the case where the roles of worker and capital supplier are kept separate.

The owner of capital resources, or the agent who acts on behalf of the owner or a number of associated owners, controls and determines, *in virtue of such ownership*, the process of production and *the action of the workers* who are engaged in the process. [Barker 1967, 105-6 emphasis added]

This assumption that the decision-making authority over people using an asset is part and parcel of the ownership of the asset (as if the employment contract were superfluous) also creeps into the modern economics literature.³⁹ It is precisely the decision-making version of the fundamental myth that the legal responsibility for (i.e., ownership of) the product was part and parcel of the ownership of a capital asset (as if it were superfluous for the capital-owner to buy all the non-capital inputs used in production).

By virtue of their property rights in a conventional corporation, the shareholders have (albeit indirectly) the positive discretionary control rights over "corporate affairs" but it is only by virtue of the employment contract that the activities of the workers become part of "corporate affairs." In short, the employment or self-rental contract is necessary to establish the positive control rights over the employees in the conventional firm. It has been argued that these "property rights" based on the self-rental contract are invalid like the "property rights" slaveowners would have based on voluntary self-sale contracts. Hence the shareholders' claim to the positive discretionary control rights over corporate employees based on "property rights" fails because (1) no such rights are part of the ownership of capital assets, and (2) the contract to acquire such "property rights" is naturally invalid.

Stakeholder Theory

The Others Stake Their Claims

There are individuals and groups in society called "stakeholders" that have "interests" in various aspects of corporate activity. Stakeholder theory would redefine the goals of the corporation so that management should pay attention to all the "legitimate" interests of the "appropriate" stakeholders in setting up the structures of corporate governance, in establishing policies, and in making decisions.

What are the roots of stakeholder theory? The conventional shareholder corporation is a very flexible state-sanctioned form of legal organization wherein a variety of individuals and groups can pool their resources together to carry out some common goal. As the corporation has evolved, the role of the shareholder has become increasingly formal and fictional. In large publicly traded companies, the stock market has euthanized the shareholders as owners of a company; they remain only as owners of securities. The control rights have fallen *de facto* into management's hands. Or it might be said that management together with various political allies have shaped Anglo-American institutions to atomize shareholder power so that managers could take over the control rights [see Roe 1994]. In either case, the result has been that the legitimizing role of the shareholders as the source of management's delegated power has been eliminated so that management has a crisis of legitimacy.

³⁹ For instance, the "rights of authority at the firm level are defined by the ownership of assets, tangible (machines or money) or intangible (goodwill or reputation)." [Holmstrom and Tirole 1989, 123]

Corporate Social-ism Redux

When those in power lose the basis of their legitimacy, they tend to hear "voices in the air" that tell them of "higher callings." Managers now hear the higher calling of social responsibility through stakeholder management. Large corporations have become social institutions that are embedded in various ways in the affairs of individuals and groups such as employees, suppliers, creditors, customers, competitors, local residents as well as shareholders. These individuals and groups have a "stake" in the corporation so they become stakeholders with "control rights" over corporate affairs (except interestingly for competitors). Management has the "higher calling" of managing, coordinating, and adjudicating all these partial interests; it can no longer be conceived as being at the sole beck and call of one particular stakeholder group, the shareholders.⁴⁰

It is not clear that stakeholder theory should be taken seriously from an intellectual viewpoint but it does provide the occasion to make a number of points. The separation of ownership and control, and the resulting lack of any real accountability between the shareholders and managers, was the original source of the legitimacy crisis. Stakeholder management would have an even greater accountability problem than would shareholder management. Some of the stakeholder groups (e.g., customers) are even more dispersed and ill-defined than the shareholders. Moreover, the relative weights of the various stakeholder interests are ill-defined so even if some stakeholders groups were well-defined and could be represented (e.g., employees), management could always play them off against other groups using a divide-and-conquer strategy. Thus even if the ultimate source of management authority were legally redefined as representing the stakeholders, the same legitimacy crisis would just emerge in another way.

The Only Workable Constituency

Some writers in the stakeholder tradition have pointed out that there is actually only one stakeholder group that can have the organization and the information to hold management accountable. "The only cohesive, workable, and effective constituency within view is the corporation's work force." [Flynn 1973, 106] Indeed, as emphasized by Coase in his classical work on the nature of the firm, a firm represents a lower-cost solution of a coordinated action problem than coordination through the marketplace. Coase in effect answers the question: "Doesn't [employee ownership] just create a whole new set of agency costs?" [Minow quoted in Blair 1996, 66]. The coordination problem for effective governance by people who already act collectively together in the firm for eight or more hours a day is likely to be minuscule compared to the problem of joint action by far-flung external shareholders or stakeholders. But the case for the democratic firm need not rest on such expediencies.

Similarities with Rationale for Voucher Investment Funds

There is an interesting parallel between the corporate governance debate for Berle-Means corporations in the West and for the post-voucherization companies in the transitional economies of the East. Indeed, the voucherized companies might be seen as a stakeholders' dream since bits of shares were usually held by employees, financial institutions, pension funds, local and national governments, and even customers (in the form of citizens at large). Management was in a good position to be responsible to everyone and thus accountable to no one. But since management was viewed unsympathetically by the western and domestic advisors (usually due

⁴⁰ This stakeholder management argument for a form of corporate socialism could be viewed as repeating at the corporate level essentially a standard type of "higher calling" argument for socialism at the level of government.

to stereotypes of managers as *nomenklatura*), many of the mass privatization programs promoted powerful investment funds (e.g., in the Czech Republic) to provide "corporate governance." The logical problem in this approach was that the investment funds had an even more severe Berle-Means problem of dispersed shareholding than the operating corporations.

The investment fund strategy and the stakeholder management strategy both try to suggest "solutions" to the corporate governance problem that postulate managers who would be even more unaccountable. In both cases, the actual logic seems to be that the suggested managers were viewed as acceptable mandarins who could wield power in a "professional and responsible manner" and thus without any further need for those monitors to be effectively monitored. The potentially infinite regress of monitors needs to stop not at some favored class of "professional and responsible" mandarins but at some flesh-and-blood principals who are either themselves the agents or can effectively control the agents.

Stakeholders' Control Rights

There are other conceptual problems in stakeholder theory. Suppose that a party C (Company) might carry out an activity that will "affect the interests" of party S (Stakeholder). Should S therefore have some "control" over C's decision? Firstly "control" must be differentiated into the "negative control" to withhold consent (when consent is required) and to thereby constrain C's decision, and the "positive control" to be party to making C's decision (e.g., to be one of the principal's for whom C is an agent). S's "interests" might be affected in ways that do not even have any associated negative control right.

Although private property rights protect private property from physical changes chosen by other people, no immunity is implied for the exchange value of one's property. Nor does it imply that my use of my goods, which may not in any way affect your goods, cannot be a use that you find objectionable on moral or emotional grounds. [Alchian 1977, 131]

For instance, S might be a local resident who takes umbrage at the color of C's buildings or at the pink plastic flamingos on C's grounds but it is hard to see how S's consent should be required to avoid such an externality. When the company increases the price of its output, that certainly affects the interests of each potential customer but it is hard to see why the company should be required to get the consent of the potential customers—not to mention why the potential customers should have any positive control rights over such price decisions.

To plausibly claim even the negative control right, the person or property of S would have to be causally affected by C's activity. For market exchange, the consent implied by a negative control right is required. Effects external to market transactions (externalities) are more problematic, but the problem is how to implement effective protections. That problem would not be solved by minority representation on the board of C, and each "affected interest" cannot be given majority representation.

In general, if person C is contemplating an action that would causally affect the property of person S, then S has the right to constrain C's action by withholding consent. Person S hardly has the right to make C's decision, i.e., to choose which of the infinity of alternative actions C

might take. Thus being an "affected interest" at most generates a negative control right, not a positive control right over the party that might affect one's interests.

Who's the Firm? The *De Jure* Firm and the *De Facto* Firm

If the corporation is thought of as a box, then the question of who are to be the members of the corporation could be paraphrased as the question of who is to be inside the box. Those (legally) inside the box (i.e., the shareholders in the conventional corporation) have the ultimate positive control rights; they are the principals for whom the managers act as agents. Having one's interests affected by a company's activities is at best the basis for a negative control right and does not place one "inside the box."

How can one pick out one stakeholder group, the employees, and argue that they should be the ones inside the box? Aren't they the prime example of stakeholders whose interests are affected by the corporate activities? The corporate employees (including managers) are not *just* affected by the corporate activities. The activities of the company *are* their activities from the *de facto* viewpoint. To view employees as being "affected" is to view them as being external whereas the point is that they are already *de facto* inside the box. As with actions, so it is with decisions. Who are the governed or managed in a company? Who is being told what to do? Not the customers, suppliers, creditors, local residents, or even shareholders. Only the people who work in the company have their decisions made (within the scope of the work) as a *de facto* part of the corporate decision-making. They are the governed or managed in the company from the *de facto* viewpoint.

In the standard company from the *de jure* viewpoint, it is the shareholders who are inside the box. Through the whole representation mechanism of the company board and the agency relationship with management, the shareholders are *de jure* making decisions and carrying out certain business activities—and accordingly they ultimately receive the *de jure* responsibility for the positive and negative results (i.e., legally appropriate the whole product through their corporate embodiment). But I have argued that this whole theory is based on the contracts for the employees to transfer their decision-making and responsibility to the employer (the corporate embodiment of the shareholders)—an alienation that is *de facto* impossible. From the *de facto* viewpoint, it is the people who work in the firm who are inside the box, not the shareholders. Thus one might say that there is a *de jure* firm (consisting of the shareholders) and a *de facto* firm (consisting of the people working in the firm). These "two firms" were observed long ago by Lord Eustace Percy.

Here is the most urgent challenge to political invention ever offered to the jurist and the statesman. The human association which in fact produces and distributes wealth, the association of workmen, managers, technicians and directors, is not an association recognised by the law. The association which the law does recognise—the association of shareholder-creditors and directors—is incapable of production or distribution and is not expected by the law to perform these functions. [quoted in Goyder 1961, 57]

In view of the responsibility principle (assign *de jure* responsibility in accordance with *de facto* responsibility) and the democratic principle (assign *de jure* decision-making in accordance with

de facto decision-making), it is not surprising that the solution of the democratic or human-capitalist firm lies in identifying the *de jure* firm with the *de facto* firm.

Final Points

It is clear that the arguments and points of view presented here are "heresies" at odds with today's "orthodoxy." The differences are not in the details or only at the edges; the differences are major and central. Perhaps the most surprising point is that the differences are mainly on factual questions rather than normative principles. For instance, the normative principle of assigning *de jure* responsibility in accordance with *de facto* responsibility is fundamental to contemporary jurisprudence and is thus not at odds with today's conventional wisdom. The primary differences are concerned with the facts about conventional institutions (e.g., the structure of property rights in production) and about human beings ("human nature"). In conclusion, I will mention three institutional facts followed by two facts of human nature that are basic to the arguments presented here:

- that the identity of the residual claimant ("firm") in a production opportunity is determined in a market economy by the *contractual* fact-pattern of being the last legal owner of the inputs (and not by some mythical "ownership" of a production set);
- that the ownership of the whole product of a production opportunity is legally *appropriated* (as opposed to being an already owned part of the mythical "ownership of the firm");
- that the whole product is appropriated by *one* legal party, the residual claimant (as opposed to the "distributive shares" or "nexus of contracts" metaphors which picture each factor as owning part of the product);
- that human actions (as opposed to the services of things) are the only *de facto* responsible and decision-making factor in production (in contrast to the engineering picture that all inputs are passive or to the poetic picture that all inputs are active); and
- that the *de facto* responsibility and decision-making capacity of persons is in fact *non-transferable* from one person to another (in contrast to, say, the responsibility for the use of a tool like a truck or van).

If the above factual theses be admitted, the heretical conclusions will follow closely behind, so to resist these heresies, it is incumbent on the orthodox social scientist to show wherein the theses are false.

References

- Aigner, M. 1979. *Combinatorial Theory*. New York: Springer-Verlag.
- Alchian, A. 1977. *Economic Forces at Work*. Indianapolis: Liberty Press.
- Alchian, A. and H. Demsetz, 1972. Production, Information Costs, and Economic Organization. *American Economic Review*.62: 777-795.

- Arrow, K.J. 1971. The Firm in General Equilibrium Theory. In *The Corporate Economy*. R. Marris and A. Woods eds. Cambridge: Harvard Univ. Press.
- Arrow, K. J. and G. Debreu 1954. Existence of an Equilibrium for a Competitive Economy. *Econometrica*. 22: 265-290.
- Arrow, K. J. and F. H. Hahn 1971. *General Competitive Analysis*. San Francisco: Holden-Day.
- Barker, Ernest 1967. *Reflections on Government*. London: Oxford University Press.
- Barzel, Y. 1989. *Economic Analysis of Property Rights*. New York: Cambridge University Press.
- Batt, Francis 1967. *The Law of Master and Servant*. Fifth edition by G. Webber. London: Pitman.
- Becker, Carl. 1958. *The Declaration of Independence*. New York: Vintage Books.
- Berle, A. and G. Means, 1932. *The Modern Corporation and Private Property*. New York: MacMillan Company.
- Black, H. 1968. *Black's Law Dictionary*. St. Paul: West Publishing.
- Blair, M. M. 1995. *Ownership and Control: Rethinking Corporate Governance for the Twenty-First Century*. Washington DC: The Brookings Institution.
- Blair, M. M., Ed. 1996. *Wealth Creation and Wealth Sharing*. Washington: Brookings Institution.
- Brookings, R. S. 1929. *Economic Democracy: America's Answer to Socialism and Communism*. New York: MacMillan.
- Brookings, R. S. 1932. *The Way Forward*. New York: MacMillan.
- Brudney, V. 1985. Corporate Governance, Agency Costs, and the Rhetoric of Contract. *Columbia Law Review*. 85(7): 1403-44.
- Clark, R. C. 1985. Agency Costs versus Fiduciary Duties. In *Principals and Agents: The Structure of Business*. J. W. Pratt and R. J. Zeckhauser Eds. Boston, Harvard Business School Press: 55-79.
- Chayes, A., 1966. The Modern Corporation and the Rule of Law. In *The Corporation in Modern Society*. Ed. by E. S. Mason. New York: Atheneum.
- Christ, Carl F. 1975. The Competitive Market and Optimal Allocative Efficiency. In *Competing Philosophies in American Political Economics*. Eds. John Elliott and John Cownie, Pacific Palisades, CA: Goodyear, 332-338.
- Coase, R. H. 1937. The Nature of the Firm. *Economica*. IV (Nov. 1937): 386-405.
- Coase, R. H. 1988. *The Firm, the Market, and the Law*. Chicago: University of Chicago Press.
- Cone, C. B. 1968. *The English Jacobins: Reformers in Late 18th Century England*. New York: Charles Scribner's Sons.
- Dahl, Robert 1985. *Preface to Economic Democracy*. Berkeley: University of California Press.
- Debreu, G. 1959. *Theory of Value*. New York: John Wiley & Sons.
- Demsetz, H. 1967. Toward a Theory of Property Rights. *American Economic Review*. 57(May 1967): 347-359.
- Dworkin, R. 1978. *Taking Rights Seriously*. Cambridge: Harvard University Press.

- Easterbrook, F. and F. Fischel 1990. The corporate contract. In *Corporate law and economic analysis*. L. A. Bebchuk Ed. Cambridge, Cambridge University Press: 182-215.
- Ellerman, David P. 1982. *Economics, Accounting, and Property Theory*. Lexington MA: D.C. Heath.
- Ellerman, David P. 1990. *The Democratic Worker-Owned Firm*. London: Unwin-Hyman Academic.
- Ellerman, David P. 1992. *Property & Contract in Economics: The Case for Economic Democracy*. Cambridge: Blackwell.
- Ellerman, David P. 1995. *Intellectual Trespassing as a Way of Life: Essays in Philosophy, Economics, and Mathematics*. Lanham MD: Rowman & Littlefield.
- Fama, E. 1996. Agency problems and the theory of the firm. In *The Economic Nature of the Firm*. Second edition. L. Putterman and R. Kroszner Eds. Cambridge, Cambridge University Press: 302-314.
- Fama, E. and M. Jensen 1996. Organizational Forms and Investment Decisions. In *The Economic Nature of the Firm*. Second edition. L. Putterman and R. Kroszner, Eds. Cambridge, Cambridge University Press: 336-344.
- Flynn, J. J. 1973. Corporate Democracy: Nice Work if You Can Get It. In *Corporate Power in America*. R. Nader and M. J. Green Eds. New York, Grossman Publishers: 94-110.
- Franklin, John Hope 1969. *The Free Negro in North Carolina 1790-1860*. New York: Russell & Russell.
- Frey, B. and H. Buhofer 1986. A Market for Men, or : There is no such Thing as a Free Lynch. *Journal of Institutional and Theoretical Economics*. 142: 739-744.
- Friedman, Milton 1962. *Capitalism and Freedom*. Chicago: University of Chicago Press.
- Furubotn, E. and S. Pejovich, Eds. 1974. *The Economics of Property Rights*. Cambridge: Ballinger Publishing Company.
- Gierke, Otto von 1958. *Political Theories of the Middle Age*. Trans. F. W. Maitland. Boston: Beacon Press.
- Gierke, Otto von 1966. *The Development of Political Theory*. Trans. B. Freyd. New York: Howard Fertig.
- Goyder, G. 1961. *The Responsible Company*. Oxford: Basil Blackwell.
- Gray, Lewis Cecil 1958. *History of Agriculture in the Southern United States to 1860*. Vol. 1. Gloucester, Mass.: Peter Smith.
- Grossman, S. and O. Hart 1982. Corporated financial structure and managerial incentives. In *The economics of information and uncertainty*. J. McCall Ed. Chicago, University of Chicago Press: 107-137.
- Grotius, Hugo. 1901 (Orig. 1625). *The Rights of War and Peace*. Translated by Campbell, A. C. Washington: M. Walter Dunne.
- Haavelmo, T. 1960. *A Study in the Theory of Investment*. Chicago: University of Chicago Press.
- Hansmann, H., 1990. Ownership of the firm. In *Corporate law and economic analysis*. Ed. by L. A. Bebchuk. Cambridge: Cambridge University Press: 281-313.
- Hansmann, H. 1996. *The Ownership of Enterprise*. Cambridge: Harvard University Press.

- Hart, O. 1995. *Firms, Contracts, and Financial Structure*. Oxford: Clarendon Press.
- Hart, O. and J. Moore 1990. Property Rights and the Nature of the Firm. *Journal of Political Economy*. 98: 1119-59.
- Hirshleifer, J. 1970. *Investment, Interest, and Capital*. Englewood Cliffs: Prentice-Hall.
- Hobbes, Thomas. 1958 (Orig. 1651). *Leviathan*. Indianapolis: Bobbs-Merrill.
- Holmstrom, B. and J. Tirole 1989. The Theory of the Firm. In *Handbook of Industrial Organization Vol. I*. R. Schmalensee and R. Willig Eds. Amsterdam, North-Holland: 61-133.
- Hutcheson, Francis. 1725. *An Inquiry into the Original of Our Ideas of Beauty and Virtue*. London.
- Hutcheson, Francis. 1755. *A System of Moral Philosophy*. London.
- Hutcheson, Francis. 1969. *Collected Works of Francis Hutcheson*. Hildesheim: Georg Olms Verlangsbuchhandlung.
- Imai, K. and R. Komiya, Eds. 1994. *Business Enterprise in Japan: Views of Leading Japanese Economists*. Cambridge: MIT Press.
- Itami, H., 1994. The "Human-Capital-ism" of the Japanese Firm as an Integrated System. In *Business Enterprise in Japan*. Ed. by K. Imai and R. Komiya. Cambridge: MIT Press: 73-88.
- Jensen, M. C. and W. H. Meckling 1976. Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*. 3(4): 305-60.
- Kenney, M. and R. Florida, 1993. *Mass Production: The Japanese System and Its Transfer to the U.S.* New York: Oxford University Press.
- Luther, Martin. 1942. Concerning Secular Authority. In *Readings in Political Philosophy*, ed. F. W. Coker, 306-29. New York: Macmillan.
- Lynd, Staughton 1969. *Intellectual Origins of American Radicalism*. New York: Vintage Books.
- Marx, Karl 1977. *Capital*. Volume I. Trans. B. Fowkes. New York: Vintage Books.
- Matsumoto, K. 1991. *The Rise of the Japanese Corporate System: The Inside View of a MITI Official*. London: Kegan Paul International.
- Menger, Anton 1899. *The Right to the Whole Produce of Labour: The Origin and Development of the Theory of Labour's Claim to the Whole Product of Industry*. Trans. M.E. Tanner. Intro. by Herbert S. Foxwell. London: Macmillan and Co (Reprinted by Augustus Kelley).
- Miller, M. H. and F. Modigliani 1961. Dividend Policy, Growth, and the Valuation of Shares. *The Journal of Business*. 34(October 1961): 411-433.
- Montias, J. M. 1976. *The Structure of Economic Systems*. New Haven: Yale University Press.
- Morley, J. 1949 (1874). On Compromise. In *Primer of Intellectual Freedom*. Howard Munford Jones Ed. Cambridge, Harvard University Press: 94-109.
- Morris, Clarence. 1959. *The Great Legal Philosophers*. Philadelphia: University of Pennsylvania Press.
- Nozick, Robert 1974. *Anarchy, State, and Utopia*. New York: Basic Books.

- Peach, Bernard (ed.) 1979. *Richard Price and the Ethical Foundations of the American Revolution*. Durham: Duke University Press.
- Perry, Stephen 1997. Libertarianism, Entitlement, and Responsibility. *Philosophy & Public Affairs*. 26 (4), 351-96.
- "Philmore, J." [David Ellerman] 1982. The Libertarian Case for Slavery: A Note on Nozick. *The Philosophical Forum*. Vol. XIV, No. 1, Fall 1982. 43-58.
- Putterman, L. 1996. Ownership and the nature of the firm. In *The Economic Nature of the Firm*. L. Putterman and R. Kroszner Eds. Cambridge, Cambridge University Press: 361-369.
- Putterman, L. and R. S. Kroszner, Eds. 1996. *The Economic Nature of the Firm*. 2nd edition. Cambridge: Cambridge University Press.
- Quirk, J. and R. Saposnik 1968. *Introduction to General Equilibrium Theory and Welfare Economics*. New York: McGraw-Hill.
- Ranney, A. 1975. *Curing the Mischiefs of Faction*. Berkeley: University of California Press.
- Roe, M. J. 1994. *Strong Managers, Weak Owners: The Political Roots of American Corporate Finance*. Princeton: Princeton University Press.
- Ross, Stephen A., and Randolph W. Westerfield. 1988. *Corporate Finance*. St. Louis: Times Mirror/Mosby.
- Samuelson, P. 1976. *Economics*. Tenth edition. New York: McGraw-Hill.
- Schlatter, Richard 1951. *Private Property: The History of an Idea*. New Brunswick: Rutgers University Press.
- Seabury, Samuel. 1969 (Orig. 1861). *American Slavery Justified by the Law of Nature*. Miami: Mnemosyne Publishing Company.
- Sterkx, H. E. 1972. *The Free Negro in Ante-Bellum Louisiana*. Cranbury, N.J.: Associated University Presses.
- Tobin, J., 1970. On Limiting the Domain of Inequality. *J. of Law and Economics*. 13 (Oct. 1970).
- Toohey, R. E. 1978. *Liberty & Empire: British Radical Solutions to the American Problem 1774-1776*. Lexington: University Press of Kentucky.
- Umbeck, J. 1981. Might Makes Right: A Theory of the Formation and Initial Distribution of Property Rights. *Economic Inquiry*. 19(1): 38-59.
- Varian, H. 1984. *Microeconomic Analysis*. 2nd ed. New York: W.W. Norton.
- Wieser, F. von 1930. *Natural Value*. Trans. C.A. Malloch. New York: G.E. Stechert and Company.
- Wills, Garry. 1979. *Inventing America*. New York: Vintage Books.