

Consumer Lock-In and the Theory of the Firm

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Accepting the institution of the large corporation (as we must), and studying it as a human institution, we have to consider the effect on property, the effect on workers, and the effect upon individuals who consume or use the goods or services which the corporation produces or renders. This is the work of a lifetime; the present volume is intended primarily to break ground on the relation which corporations bear to property.

-Adolf A. Berle, Jr.¹

[T]he emphasis... on joint input production is too narrow and therefore misleading. Contractual relations are the essence of the firm, not only with employees but with suppliers, customers, creditors, etc.... [J]oint production can explain only a small fraction of the behavior of individuals associated with a firm. A detailed examination of these issues is left to another paper.

-Michael Jensen and William Meckling²

Any discussion of the economic institutions of capitalism that does not deal with final product markets is egregiously incomplete.... Although I am confident that the approach herein developed has considerable generality... an application to final product markets is beyond the scope of this book.

-Oliver E. Williamson³

^{*} Associate Professor, Santa Clara University School of Law. A summer research stipend from Santa Clara Law School helped support the writing of this Article. I would like to express my sincere thanks to Professor Charles R. T. O'Kelley, and the editors of the *Seattle University Law Review*, for their generous invitation to participate in this symposium.

^{1.} ADOLF A. BERLE, JR. & GARDINER C. MEANS, THE MODERN CORPORATION AND PRIVATE PROPERTY xxii (1932) (emphasis added).

^{2.} Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure*, 3 J. FIN. ECON. 305, 310 (1976) (emphasis added).

^{3.} OLIVER E. WILLIAMSON, THE ECONOMIC INSTITUTIONS OF CAPITALISM 396 (1985) (emphasis added).

I. INTRODUCTION

Corporate law scholarship since the 1930s has focused steadily on shareholder interests and has left the concerns of other stakeholders in corporate enterprise undertheorized.⁴ Mainstream accounts in particular have failed to critically examine consumer interests in the corporation. An important example of this disparate attention is seen in analysis of the role that "lock-in" plays in the history, theory, and operation of corporate enterprise. Corporate law scholars have demonstrated the need that large corporations have to "lock-in" capital to create and sustain large-scale productive enterprises.⁵ Scholars have identified the economic and legal innovations that accomplish such capital lock-in, traced the implications of such innovations for shareholder interests, and articulated theoretical and policy insights that ameliorate the shareholder vulnerability that capital lock-in produces.⁶ The literature in this area is extensive, sophisticated, and elegant. But it is limited to the shareholder perspective. The interests of other corporate stakeholders, and consumers in particular, are also wrapped up in lock-in dynamics. Yet, these interests have received far less attention.

The advent of the modern corporation separated not only ownership from control but also production from consumption. The agency problem that arose between owners and managers of firms also emerged between producers and consumers. Just as corporations needed to lock-in capital to sustain large-scale operations, so too did they need to lock-in consumers to justify and reduce the risks of asset-specific investment. Large corporate operations succeeded because they solved both the capital and consumer lock-in challenges. This Article explores ways in which modern consumers, like shareholders, can find themselves in a very real sense locked into the corporations with which they associate. This aspect of consumption has gone unrecognized in corporate theory and normative accounts of desirable corporate governance frameworks. My analysis suggests that market forces and external regulatory relief are inadequate salves to the consumer predicament that I describe. I conclude that a departure from the shareholder wealth maximization norm and an embrace of a multi-stakeholder corporate governance regime may be necessary to overcome agency problems associated with consumer lock-in.

^{4.} See generally David G. Yosifon, *The Consumer Interest in Corporate Law*, 43 U.C. DAVIS L. REV. 253 (2009).

^{5.} See, e.g., Margaret M. Blair, Locking in Capital: What Corporate Law Achieved for Business Organizers in the Nineteenth Century, 51 UCLA L. REV. 387 (2003).

^{6.} See infra Part II (reviewing these aspects of lock-in).

The Article is structured as follows. Part II examines the role that "lock-in" plays in modern theories of the firm and in the historical development of corporate enterprise, including analysis of the agency problems associated with shareholder lock-in. Part III explores the relationship between the modern corporation and consumption, including an examination of the consumer's place in prevailing views of desirable corporate governance norms. Part IV examines several different ways in which consumers of corporate goods and services can become "locked" into consumption relationships with particular firms in a manner that parallels the shareholder lock-in predicament. Part IV also explores the dearth of consumer lock-in solutions as compared to solutions that shareholders have available to solve their lock-in problems. Having begun to integrate consumer lock-in into a more comprehensive theory of the firm, Part V concludes that some corporate law solutions that have been developed to ameliorate shareholder lock-in problems might also be useful to aid locked-in consumers. While this would work a substantial change in corporate governance law, I argue that it would not cause an unduly disruptive change in corporate governance practice.

II. LOCK-IN AND THEORIES OF THE FIRM

This Part examines the role that capital lock-in plays in modern theories of the firm. It emphasizes the importance of corporate law in helping firms to achieve capital lock-in. It attends to the shareholder agency problems that capital lock-in exacerbates and reviews prevailing solutions to the shareholder agency problem. This explication of the need for capital lock-in in firm operations, and the methods by which it is achieved, sets the stage for the treatment of consumer lock-in dynamics in Parts III and IV.

A. Firms Can Reduce Production Costs

The modern theory of the firm was forged at a time of great uncertainty about the plausibility, legitimacy, and future of the capitalist order. When a young Ronald Coase came to the United States from his native England in the early-1930s, he left one capitalist nation still leveled by the Great Depression and found another uncertainly staggering back to its feet.⁷ Back at the London School of Economics where he had been trained, and again in the universities he visited in America, Coase's professors stressed that only decentralized market economies could give rise to consistently accurate prices, efficient production, and beneficial ex-

^{7.} R. H. Coase, The Nature of the Firm: Origin, 4 J.L. ECON. & ORG. 3, 7-17 (1988).

change.⁸ This neoclassical economic dogma was difficult for many of Coase's generation to swallow, in part because of the apparent evidence to the contrary they saw in the young Soviet Union, which in those years purported to use collectivist planning to outpace the West's productivity without the traumatic dislocations felt throughout the capitalist world in the Depression era.⁹

Coase's seminal insight about firms came when he realized that the world around him did not evince the stark distinction between planned and unplanned production that many saw represented by the free and scattered West, on the one hand, and the organized Communist world, on the other.¹⁰ Coase visited several large-scale American companies, interviewed high-ranking executives and managers, and discovered that there was a tremendous amount of planning going on within the capitalist economy.¹¹ He saw production decisions orchestrated not by the invisible hand of the market, but by the heavy hand of authoritative decision-makers wielding control over enormous aggregations of capital and labor within individual firms.¹² Coase saw that, far from being an exotic artifact of Soviet ideology, "islands of conscious power" flourished throughout the sea of the free economy.¹³ Convinced by the evidence before him that planning was a plausible means of organizing produc-

Id.

10. See id. at 7-17.

^{8.} *Id.* at 14–15 ("I did not omit to visit the University of Chicago . . . I quote in my letter what I describe as a characteristic statement, 'Property, competition and freedom are names for the same thing,' a remark which did not do much to aid me in the search for a theory of integration."). Coase also reflected on the origins of *The Nature of the Firm* in the University of Chicago Law School's 17th Annual Coase Lecture (established in honor of Ronald Coase). *See* Ronald Coase, 17th Annual Coase Lecture at the University of Chicago: The Present and Future of Law and Economics (Apr. 1, 2003), *available at* http://www.law.uchicago.edu/node/1406.

^{9.} See Coase, supra note 7, at 8.

It would be very easy for someone today to have a mistaken idea about the situation as we saw it in 1931. The storming of the Winter Palace in St. Petersburg had taken place in October 1917, some fourteen years previously. After a period of war and civil strife and an initial period of centralized control, Lenin had instituted the New Economic Policy [I]t was not easy to form a view of how planning in Russia would actually work. We had heard of the construction of the vast Dneieper Dam on the Volga and I went to see its giant generators being made, at the General Electric works in Schenectady. But detailed knowledge was hard to get.

^{11.} *Id.* at 14 ("I am quite a lawyer in my craftiness in putting questions. I can get admissions regarding costs out of them without them realizing that they have done so." (quoting from contemporaneous letters to Ronald Fowler)).

^{12.} Id.

^{13.} See R. H. Coase, *The Nature of the Firm*, 4 ECONOMICA 386, 388 (1937). Coase made famous the "islands of conscious power" description of the firm, which he quoted from D. H. ROBERTSON, CONTROL OF INDUSTRY 85 (1923) (characterizing as "islands of conscious power in this ocean of unconscious co-operation like lumps of butter coagulating in a pail of buttermilk").

tion, Coase wondered why planning did not appear to be a *sufficient* means of organizing it.¹⁴ Why did the West have firms, even large firms, but not just one big firm, like the Soviets had (or at least claimed to want)?

Coase found his answer by making explicit the logic that was implicit in the business conduct he observed. There are costs to organizing production through serial, arms-length market exchanges-what economists today call "transactions costs." The most important costs in market-based production, according to Coase, are the costs of "discovering" (through inquiry and negotiation) the prices of various production inputs.¹⁵ In light of such transactions costs, it will sometimes be cheaper to simply vertically integrate production components within a single firm, where resources can be deployed as needed at the will of firm managers who need not continuously seek out and dicker over the supply of raw materials, design, and labor in the market.¹⁶ Locking-in production components can thus overcome some transactions costs. But it also introduces new ones. When a firm vertically integrates, it loses the efficiency and disciplining power of competitive prices that are available only in spot markets. A firm's in-house employees must be monitored and directed, for example, and those monitors and directors must be monitored and directed. A widget mine that is owned in-house instead of rented in a spot market may become worth less than was paid for it if new mines are discovered or new widget-making materials become available. Thus, firms will "make" within the firm rather than "buy" in the market only when the bureaucratic costs of managing locked-in assets in-house are outweighed by the transactions costs involved in gathering free-flowing assets in the market.¹⁷

Coase's transactions costs theory of the firm put corporate law scholars on a path of treating firms as real entities. It made the boundary between resources locked "in the firm" and those outside of it "in the market" the focus of analytic inquiry.¹⁸ More modern nexus-of-contract theories of the firm endeavor to elude this issue by asserting that firm boundaries are illusory. Under this view, "it makes little or no sense to try to distinguish those things which are 'inside' the firm . . . from those things that are 'outside' of it," since "[t]here is in a very real sense only a

^{14.} See Coase, supra note 13, at 387-88.

^{15.} See id. at 390.

^{16.} See id. at 391.

^{17.} See id. at 395.

^{18.} See Oliver D. Hart, *Incomplete Contracts and the Theory of the Firm*, 4 J.L. & ECON. 119, 120 (1988) ("Coase began to deal with the very questions that neoclassical theory had ignored. What is a firm? Where do the boundaries of one firm cease and those of another firm begin?").

multitude of complex relationships (i.e., contracts) between the legal fiction (the firm) and the owners of labor, material and capital inputs and the consumers of output."¹⁹ While coherent, this approach merely "shift[s] the terms of the debate"²⁰ from distinctions between entities and markets to distinctions between different types of contracts within the nexus. That is, while the transactions costs approach struggles to explain why organization is pursued through firms or markets, the nexus-ofcontracts theory must grapple instead with "the question of why particular 'standard forms' are chosen."²¹ In this section, I focus on the transactions costs framework in order to understand why corporate stakeholders might want to integrate within the auspices of a single-governance structure. Once these reasons are established, I will make a normative claim about the "terms" that corporate law imposes on its stakeholders, which can perhaps best be understood within a nexus-of-contracts framework.²² Thus, in this Article, the transactions costs and nexus-of-contracts theories are treated not as competing views, but as two different lenses that both aid the examination and treatment of corporate design.

While Coase provided the formula, the variables that help to explain when it is cheaper for a firm to "make" than to "buy" have been most extensively fleshed out by Coase's protégé, Oliver Williamson. Williamson showed that firm-based organization tends to emerge where production requires putting assets to uses that substantially undercut their value for some other use.²³ This important point is best grasped through an illustration. To become an auto-chassis manufacturer requires the commitment of a great deal of capital, which once poured into chassis machinery, cannot readily be redeployed to another use, such as making ploughshares or pruning hooks.²⁴ Now, a chassis must have a body before it can be marketed as a car. And the manufacture of auto-bodies also requires a large commitment of assets that cannot easily be redeployed. A chassis manufacturer and a body-maker might meet in the "market" and negotiate a supply contract, but doing so will prove very difficult.

^{19.} Jensen & Meckling, supra note 2, at 311.

^{20.} Oliver Hart, An Economist's Perspective on the Theory of the Firm, 89 COLUM. L. REV. 1757, 1764 (1989).

^{21.} Id.

^{22.} See infra note 81 and accompanying text; see also infra Part IV.

^{23.} Prior to Williamson's innovations, Coase himself lamented that his insight was "much cited but little used." Oliver E. Williamson, *The Modern Corporation: Origins, Evolution, Attributes*, 19 J. ECON. LIT. 1537, 1546 (1981) (quoting Ronald Coase, *Industrial Organization: A Proposal for Research, in 3* ECONOMIC RESEARCH: RETROSPECT AND PROSPECT: POLICY ISSUES AND RESEARCH OPPORTUNITIES IN INDUSTRIAL ORGANIZATION 63 (Victor R. Fuchs ed., 1972).

^{24.} *Cf. Isaiah* 2:4 ("They will beat their swords into ploughshares and their spears into pruning hooks. Nation will not take up sword against nation, nor will they train for war anymore.").

Should a precise number of bodies be supplied each day? Each year? As needed? As available? What if the market demands a change in chassis design? What if bodies must be changed to comply with new regulatory requirements? The chassis- and body-makers probably cannot resolve these questions by contract in a way that they could confidently believe to be either privately or mutually beneficial.

Moreover, since the chassis-maker knows that the body-maker has a locked-in investment in body-making, the chassis-maker may come to deal rougher with the body-maker, insisting on an ever larger slice of the gains to trade in their relationship, knowing that the body-maker has limited options. And this may be a two-way threat. Knowing that the chassis-maker has assets locked into chassis manufacture, the body-maker may later try to exact higher payments and threaten to deprive the chassis-maker of the crucial bodies. The chassis-maker cannot easily turn to other body-makers because the body-maker it has been dealing with has already made specific investments in manufacturing the kinds of bodies that the chassis-maker wants. Inducing a different body-maker to invest in such asset-specific production would be more costly than dealing with a firm that has already committed its assets to such production. "Once such relationship-specific investments have been made the parties are (at least partially) 'locked in,' and hence they are at each other's mercy and opportunistic behavior may rule."²⁵

The solution is to forego the mug's game of serial contracting and, instead of fighting at arms' length in the market, join each other in the warm embrace of a firm. It is better for the chassis-maker to own the body-maker, or the body-maker to own the chassis-maker, and for the integrated car-maker to make production decisions by internal fiat rather than through continuous external negotiation. Firm-based organization limits the hold-up and opportunism that otherwise prevail in opentextured, indeterminate, ongoing relationships. The transactional theory of the firm thus recognizes firm-based organization as a *governance-based solution* to the problems associated with asset-specific lock-in.

^{25.} Hart, *supra* note 18, at 121. In a world with zero transactions costs, one would expect a suitable competitor to arrive on the scene offering bodies or chassis at a competitive price, which would rescue our parties from the hold-up threats described in the text. But in the real world, especially in markets that require asset-specific investment for entry, there *are* high transactions costs. When competitive markets cannot be relied on to solve the lock-in problem, the parties need some other solution. Of course, the example provided in the text is highly stylized. In fact, there are a wide range of relationships that emerge in productive enterprises, with many hybrid associations found in between the extremes of pure spot-market deals and fully integrated firms. *See* G. B. Richardson, *The Organisation of Industry*, 82 ECON. J. 883, 883 (1972) (repudiating stark distinctions between markets and firms and exploring "the dense network of co-operation and affiliation by which firms are inter-related").

This notion of the firm as a mechanism through which assetspecific commitments can be encouraged and managed has been expanded to include not just tangible capital assets, but investments of human capital as well. In this vein, Margaret Blair and Lynn Stout argue that the firm is a solution to "team production" problems.²⁶ Very often, people can accomplish more by working together than they can by adding together their separate work.²⁷ Indeed, some work, like lifting a heavy couch or bundling subprime mortgages, can be accomplished only through teamwork. But it is difficult to measure, reward, or punish the contributions that individual members make to collective effort. Knowing this, individual members have an incentive to slack, hoping to free ride on the efforts of others. Since everyone does this, the productivity of the whole teams suffers.²⁸

Once individual members commit to a particular team, their human capital may also suffer from the kind of asset-specificity problem witnessed when physical assets are bent, hammered, and welded into place for manufacturing. When a person thinks about and makes widgets for forty or fifty hours a week, it becomes ever more difficult for her to redeploy her human capital into thinking about and making doodads. Since her fellow team members know this, they may try to hold her up and force her to take a smaller piece of the gains to team production. But she knows the same thing about her fellow widget-makers and may try to hold them up too. According to Blair and Stout, firm-based organization can solve the team production problem, as individual members of the team relinquish both monitoring and apportioning duties to a hierarchical decision-maker that all team members agree will have complete authority over their collective activity.²⁹ The governance function of the firm provides potential team members sufficient repose to allow their (human) capital to be locked into team relationships.³

B. Corporate Law and Asset Lock-In

Firms solve the transactions costs, opportunism, and hold-up problems associated with serial, spot-market transactions by locking-in assets under a single-governance structure. Law provides a crucial technology

^{26.} See Margaret M. Blair & Lynn A. Stout, *A Team Production Theory of Corporate Law*, 85 VA. L. REV. 247, 321 (1999). Blair and Stout built on the path-breaking work of Armen A. Alchian & Harold Demsetz, *Production, Information Costs, and Economic Organization*, 62 AM. ECON. REV. 777 (1972).

^{27.} Blair & Stout, supra note 26, at 265-66.

^{28.} Id. at 265-66.

^{29.} Id. at 265.

^{30.} Id.

that helps achieve this lock-in. Henry Hansmann and Reinier Kraakman have shown that capital lock-in on a large scale cannot be accomplished without organizational law.³¹ It cannot plausibly be created through ordinary private contracting. Several people might purport to convey assets to something they want to operate as a "separate entity."³² To give this separate entity any independent stability, however, each investor would have to promise that they had no personal creditors who might come after the assets of the "separate entity" looking to satisfy the investor's private debts.³³ "The default rules of property and contract law . . . provide that, absent contractual agreement to the contrary, each of the entrepreneur's [or anyone's] creditors has an equal-priority floating lien upon the entrepreneur's [or anyone's] entire pool of assets as a guarantee of performance."³⁴ The investors must also promise that they will not subsequently enter into any deals with private creditors without specifying that the assets of the "separate" entity are unavailable to satisfy the new debt.³⁵ The group of investors would face insurmountable monitoring costs to ensure the credibility of such promises, as would anyone who wanted to extend credit to or enter into long-term business relationships with the supposedly "separate entity."³⁶ These problems are compounded in the context of large separate entities with hundreds or thousands of investors.37

Corporate law overcomes this impediment to the formation of sustainable, large organizations by providing for "affirmative asset partitioning" as a matter of organizational law.³⁸ The law imposes on all contracts everywhere in the economy an *immutable* term specifying that assets conveyed to a "corporation" are unavailable to the personal creditors of an investor in such an entity, irrespective of whether the personal debts were established before or after the investment.³⁹ The most that private creditors can get is what the law says the shareholder has—not a claim on the separate entity's assets, but a claim on residual profits, if any, of the corporate enterprise.⁴⁰

^{31.} See Henry Hansmann & Reinier Kraakman, *The Essential Role of Organizational Law*, 110 YALE L.J. 387, 406 (2000).

^{32.} *Id*.

^{33.} Id.

^{34.} See id. at 407.

^{35.} See id.

^{36.} See id.

^{37.} See id. at 407-08.

^{38.} See id. at 402.

^{39.} See id. at 409.

^{40.} Hansmann and Kraakman note that "affirmative asset partitioning," which protects the firm's assets from the creditors of its shareholders, is the "reverse of limited liability," which pro-

Corporate law provides a key legal mechanism that firms use to lock-in capital under a single-governance system. The general incorporation charter, first widely available in the mid-to-late nineteenth century, provides a default rule that capital invested in a corporation belongs to the corporate entity.⁴¹ It is locked into the firm. In exchange for her money, the investor receives stock entitling her to a pro-rata share of future profits, should the firm's directors choose to issue dividends. But the investor cannot demand that the firm buy back her shares for what she paid for them or for their current market value. She cannot force dissolution of the firm and claim her pro-rata share of assets after liabilities. Her only chance of getting her money back is to wait and hope that the firm profits and pays dividends, or else find someone else willing to buy her shares.⁴²

Why, then, would anyone invest in a corporation, rather than some other business with greater opportunity for exit? The lock-in term is attractive to shareholders in large corporate enterprises because it assures them that their fellow shareholders (or fellow shareholders' heirs) cannot drain capital out of the enterprise or force its dissolution before the thing can reap profits. Without lock-in, the firm's word in executing agreements with creditors, suppliers, and customers would be only as solid as the whim of its investors. Thus, "lock-in" was one of the features that made the corporate form such a popular and powerful mechanism to organize business in the capital-intense industrial revolution of the latenineteenth century.⁴³ Lock-in provides the institutional stability that is necessary for large, capital-intensive enterprises to thrive.⁴⁴

tects individual shareholder's personal assets from the creditors of the firm. *Id.* at 390. They argue that limited liability is neither necessary nor sufficient to establish large-scale, multiple-owner business organizations, but that such firms are unimaginable without "affirmative asset partitioning." *Id.*

^{41.} Blair, supra note 5, at 425.

^{42.} The shareholder's predicament sharply contrasts with that of a sole proprietor, who can invest her capital in widget production on Monday and change her mind on Tuesday, sell off the widget-making assets, and enter the gizmo business instead. Someone who enters into a business partnership enjoys a similar freedom. Under the common law and modern statutory law, partnerships are by default "at will." Any partner can demand dissolution of a widget partnership at any time, force a sale of partnership assets, retrieve his or her capital contribution (after partnership debts are paid off), and then enter the gizmo business, the doodad trade, or retire to Florida. Under sections 601 and 602 of the Revised Uniform Partnership Act, which reflects the contemporary law of most states, the remaining partners may continue the business of the partnership after paying the partner who wishes to "disassociate" from the partnership the value of his or her partnership interest. *See* JAMES D. COX & THOMAS L. HAZEN, BUSINESS ORGANIZATIONS LAW 17–19 (3d ed. 2011).

^{43.} According to Margaret Blair, businesses were rarely organized as corporations prior to 1800, yet by 1900, more than 500,000 businesses were incorporated in the United States. Blair, *supra* note 5, at 389 n.3.

^{44.} Id. at 389–90. But see Larry E. Ribstein, Should History Lock In Lock-In?, 41 TULSA L. REV. 523, 537 (2006) (critiquing Blair's account as involving "questionable economics and history"

C. The Problem with the Lock-In Solution

Organizational law provides affirmative asset partitioning, which makes firm-based asset lock-in both possible and sustainable.⁴⁵ These are valuable solutions to difficult problems in the organization of production. But as tends to happen in this world of scarcity, the solutions create problems of a different sort. Since shareholders cannot cash in their shares or force dissolution of the corporation, they lose an important mechanism through which they might otherwise discipline firm managers. Knowing that shareholders are locked-in, managers may shirk their duties or exploit corporate assets and opportunities for themselves.

Corporate theory recognizes several overlapping solutions to this predicament. First, the law cloaks corporate directors and officers with fiduciary obligations, requiring them to work with care and loyalty on behalf of shareholders, and imposing personal liability for any breach of these duties.⁴⁶ Second, managers have an incentive to work hard on behalf of shareholders in order to impress the capital markets, which they will need if they want to raise additional capital and expand the business.⁴⁷ Third, stock options can be used as a significant component of

47. Only the rarest corporate overseer would undertake an initial public offering to raise capital and then be content to live off the fat of the issue for the rest of her career. Such an actor is perhaps in some sense rational, but she is unlikely to be commonly found in the real world of American business, where reputation and compensation is usually linked to the size of the corporate empire over which one presides. *See* Jensen & Meckling, *supra* note 2, at 351:

[T]he expectation of future sales of outside equity and debt will change the costs and benefits facing the manager in making decisions which benefit himself at the (short-run) expense of the current bondholders and stockholders. If he develops a reputation for such dealings, he can expect this to unfavorably influence the terms at which he can obtain future capital from outside sources. This will tend to increase the benefits associated with 'sainthood' and will tend to reduce the size of agency costs.

Hetherington and Dooley noted that this motivation applies whether incumbent managers seek to raise additional capital through equity or debt because "lenders tend to base risk estimates, and thus interest rates, in part, on the market performance of the prospective borrower's shares." J. A. C. Hetherington & Michael P. Dooley, *Illiquidity and Exploitation: A Proposed Statutory Solution to*

and arguing that "[t]he explanation for the mix of forms we observe today lies in a much richer set of business, regulatory, and tax considerations than Blair's simplistic lock-in story").

^{45.} Hansmann & Kraakman, supra note 31, at 390.

^{46.} See Cox & HAZEN, supra note 42, at 198–237 (explicating fiduciary obligations owed by directors to shareholders). But see infra text accompanying notes 155–56 (discussing the very low bar that directors must clear to satisfy these obligations). Turning as we have here to an inquiry into how corporate law structures corporate governance to deal with the agency problems that capital lock-in causes it becomes useful to switch to the "nexus-of-contract" analytic lens and understanding the grant of fiduciary obligation as a "term" in the contract, which shareholders are given to induce their association with the firm. See supra text accompanying notes 18–22 (noting the hermeneutic utility of sometimes analyzing the firm as a real thing with real boundaries while at other times viewing it as merely a nexus of contracts).

director and officer compensation, which may better align directors' personal interests with those of their shareholders.⁴⁸ Fourth, corporate law gives shareholders the power to elect directors. Directors who shirk or steal may find themselves ousted in favor of a new management team. Individual, highly diversified shareholders in large, publicly traded corporations have little incentive to actively engage in corporate democracy. But institutional investors, aided by third-party investor services, can exert some pressure on boards through proxy contests and shareholder proposals.⁴⁹ Fifth, wealthy individuals, institutions, or other corporations can monitor the market, discover underperforming management teams, purchase a controlling block of that firm's shares (and votes) at a discount (because the firm is underperforming), oust incumbent management, and unleash the pent-up value of the firm for themselves. The very threat of this "market for control" haunts incumbent management, getting them up early, keeping them up late, and spurring their profit-creating imagination.50

Many scholars emphasize the market for control as a solution to the shareholder lock-in problem. But its viability is undermined by the fact that corporate law also provides incumbent directors substantial latitude to erect structural defenses against corporate takeovers. The Delaware Supreme Court insists that directors must be given such latitude to preserve their authority to manage firms in the manner they see fit, without the meddling interference of courts or other non-corporate institutions.⁵¹ While it might seem desirable to give directors discretion in ordinary business decisions while restraining their power to resist the market for control, this distinction cannot be sustained in practice without trampling

the Remaining Close Corporation Problem, 63 VA. L. REV. 1, 41 n.129 (1977) (citing WILLIAM J. BAUMOL, THE STOCK MARKET AND ECONOMIC EFFICIENCY 81 (1965)).

^{48.} See generally Charles M. Elson, Director Compensation and The Management-Captured Board—The History of a Symptom and a Cure, 50 SMU L. REV. 127, 130 (1996) (describing expansion of stock-based compensation as a method of aligning shareholder and director interests). But see generally LUCIAN BEBCHUK & JESSE FRIED, PAY WITHOUT PERFORMANCE: THE UNFULFILLED PROMISE OF EXECUTIVE COMPENSATION (2004) (doubting the viability of incentive-based compensation as a solution to the shareholder agency problem).

^{49.} See CHARLES R. T. O'KELLEY & ROBERT THOMPSON, CORPORATIONS AND OTHER BUSINESS ASSOCIATIONS: CASES AND MATERIALS 213–16 (6th ed. 2010) (discussing the emerging role of institutional investors in corporate governance).

^{50.} See Henry G. Manne, Mergers and the Market for Corporate Control, 73 J. POL. ECON. 110, 110–11 (1965).

^{51.} See Unocal Corp. v. Mesa Petrol. Co., 493 A.2d 946, 953 (Del. 1985) (allowing corporate board's resistance to threat of hostile takeover, and noting that Delaware affords directors "a large reservoir of authority upon which to draw"); see also Paramount Commc'ns, Inc. v. Time, Inc., 571 A.2d 1140 (Del. 1989) (countenancing board resistance to takeover that offered shareholders more than \$100 cash premium over prevailing market price).

the broad directorial authority that effective firms need. After all, a board's decision to, for example, pay cash reserves out in dividends, or to incur substantial debt to finance an acquisition, may be viewed from one perspective as defensive entrenchment against hostile takeovers but from another perspective as prudent business decisions made in the best interest of the firm and its shareholders. The question, in such conflicts, is whether it will be the board's opinion or the opinion of some judge that will be controlling. Even in the context of clear entrenchment against specific takeover attempts. Delaware (and its apologists)⁵² hold that directors must be given wide latitude to protect incumbent management's plans against coercive or disruptive external threats.⁵³

Despite directors' power to entrench and opportunity to slack, the mainstream view is that directors still have a strong incentive to be true to the shareholder interest.⁵⁴ The threat of a takeover battle, however low its probability of success, is still strong enough to discipline directors, given the enormous financial and reputational losses they would suffer if it were successful, or even seriously tried.⁵⁵ Others argue that directors are highly motivated to maintain a good reputation with fellow board members and within the broader corporate world.⁵⁶ The power of this corporate "reputation community" keeps directors working hard and honest on behalf of their shareholders—even where the law and market dynamics may be insufficient to compel them.⁵⁷

If these mechanisms fail to provide good corporate governance, the shareholder's final solution to the agency problem attendant to capital lock-in is to exit through secondary markets. Our highly robust securities markets, with professional, cheap broker-intermediaries, make stocks a highly liquid investment. In practice, it is not difficult to "cash-in" an investment in a large, publicly held company, even though one cannot

^{52.} See Stephen M. Bainbridge, The New Corporate Governance in Theory and Practice 136–53 (2008).

^{53.} In the context of clear defensive efforts in the face of explicit takeover threats, Delaware evaluates directorial conduct under the "enhanced business judgment rule," which requires directors to affirmatively show that they have investigated and determined that there is an external threat to the corporate bastion and that their defensive maneuvers are proportional to the threat. *See Unocal Corp.*, 493 A.2d at 954 (explicating the enhanced business judgment rule in the context of board resistance to threats of takeover).

^{54.} See BAINBRIDGE, supra note 52, at 77-104.

^{55.} See Hetherington & Dooley, supra note 47, at 40 n.127 (citing J. A. C. Hetherington, Fact and Legal Theory: Shareholders, Managers, and Corporate Social Responsibility, 21 STAN. L. REV. 248, 270 n.84 (1969)).

^{56.} See BAINBRIDGE, supra note 52, at 77–105.

^{57.} Id.

"cash-in" directly with the corporate treasury.⁵⁸ The real world mechanics of getting out of a publicly traded corporation, where one has no right to asset dissolution, are usually far simpler than exiting a partnership, where dissolution or disassociation is a right. Of course, the price that shareholders can get for their shares on the secondary market will be depressed if they are selling stock in a firm with unsatisfactory management. But the option to exit is almost always available at some price.

Given such legal-, norm-, and market-based protections for shareholders, few prominent scholars explicitly stressed shareholder lock-in per se as the most pressing problem facing shareholders.⁵⁹ Indeed, when Berle and Means first diagnosed the consequences of the modern corporation's historical emergence, they emphasized that the organized securities market, which helped make modern corporations possible, also made ownership stakes in corporations uniquely liquid, as compared to traditional forms of property ownership, such as real estate.⁶⁰

The transactions costs theory of the firm emphasizes the importance of firm-based structures to the effective organization of production, especially in the context of asset specificity. Corporate law facilitates the formation of firms, which can lock-in assets under a single-governance regime. Corporate law, norms, and the market combine to relieve shareholders of the agency problems associated with such lock-in mechanisms. The system is elegant and coherent. However, this coherence begins to fray when we turn our attention from shareholders to other corporate stakeholders whose interests are also wrapped up in organizational lock-in dynamics.

III. THE CORPORATE RECONSTRUCTION OF AMERICAN CONSUMPTION

In their seminal tome, *The Modern Corporation and Private Property*, Berle and Means recognized the historical separation of ownership

^{58.} Moreover, any loss a shareholder must suffer due to managerial malingering when exiting through the market at a depressed price is no different than the loss that a partner suffers when exiting a partnership by exercising the right to force dissolution or disassociation. The value of the partnership's assets on the secondary market will suffer due to the neglect or exploitation of a lazy or unfaithful partner. The problem is somewhat diminished because all partners have a right to control the partnership and can, unlike shareholders, attend directly to the value of their own investment. But partners cannot keep their less competent or honest partners off the controls either.

^{59.} See, e.g., BAINBRIDGE, supra note 52 (containing no explicit discussion of lock-in); FRANK H. EASTERBROOK & DANIEL R. FISCHEL, THE ECONOMIC STRUCTURE OF CORPORATE LAW (1991) (same); Jensen & Meckling, supra note 2 (same). But see Ribstein, supra note 44, at 525 ("[I]t is not clear that shareholders will always want capital lock-in even though lock-in encourages contributions by other constituencies. The power to withdraw capital may be a necessary way to control agency costs by managers or opportunism by majority shareholders.").

^{60.} BERLE & MEANS, supra note 1, at 65.

and control as the central attribute, and the key analytic problem, of the modern corporation.⁶¹ Less well-recognized, and less fully problematized, is the fact that the emergence of the modern corporation also ushered in a dramatic separation of production and consumption in American life. Before the dawn of large-scale corporate organization, most Americans consumed more or less what they, or a close-knit network of friends and neighbors, were able to produce.⁶² In such a context, production and consumption interests were literally united. The "relationship" between production and consumption was managed through individual election, family structures (e.g., patriarchy), and community norms.⁶³ This unity of production and consumption in pre-corporate society was made possible by the simple and limited nature of production and consumption. Little was produced and little was consumed.

The new, large corporations of the late-nineteenth and earlytwentieth centuries took production out of the home, leaving only consumption behind. The disassembly of household economies and their reconstitution in specialized, factory-based production required people who had once acquired food, clothing, and entertainment within the household to navigate the purchase of such items in the market.⁶⁴ This

^{61.} Id. at 4. But see Stephen F. Diamond, Beyond the Berle and Means Paradigm: Private Equity and the New Capitalist Order, in THE EMBEDDED FIRM: CORPORATE GOVERNANCE, LABOR, AND FINANCE CAPITALISM 151, 172 n.60 (Cynthia A. Williams & Peer Zumbansen eds., 2011) ("Although Berle and Means offer considerable empirical evidence, upon close examination their evidence is not as supportive of diffuse ownership as is often believed." (quoting Clifford G. Hold-erness, The Myth of Diffuse Ownership in the United States, 22 REV. FIN. STUD. 1377, 1402 (2009))).

^{62.} According to historian Alfred D. Chandler, "the family remained the basic business unit" in the United States at least through the 1840s. ALFRED D. CHANDLER, JR., THE VISIBLE HAND: THE MANAGERIAL REVOLUTION IN AMERICAN BUSINESS 17 (1977).

^{63.} See Christopher Clark, *Household Economy, Market Exchange and the Rise of Capitalism in the Connecticut Valley, 1800–1860*, 12 J. SOC. HIST. 169, 173 (1979) (finding that into the earlynineteenth century, "[r]ather than relying on the market, rural families supplied their wants both by producing their own goods for consumption and by entering in complex networks of exchange relationships with their neighbors and relatives").

^{64. &}quot;[T]he quantity and variety of consumer goods available through the market economy ... increase[d] enormously after the mid-1840s." JAMES LIVINGSTON, PRAGMATISM AND THE POLITICAL ECONOMY OF CULTURAL REVOLUTION, 1850–1940, at 30 (1994). For example, the supply of home-made clothing "collapsed" by the early 1850s, whereupon increasing proportions of household expenditures were for ready-made clothing. Livingston points to the 1880s as the "golden age" of consumer-oriented business:

This was the moment at which companies such as Procter & Gamble, Libbey Foods, General Mills, Duke Tobacco, Johnson & Johnson, and Coca-Cola reorganized and adopted a "mass market" strategy predicated on high volume, low margins, new packaging, and recognizably modern advertising campaigns. It was also the moment at which visionaries such as A. Montgomery Ward and Richard Sears invented the retail mail-

separation introduced a potential disjunction in motives and incentives between producer and consumer.⁶⁵ In short, the separation introduced an agency problem between producer and consumer. This agency problem has received far less attention in corporate law scholarship than has the agency problem between owners and managers, but it is no less vexing.

This is not to gainsay that consumers have benefitted tremendously from the emergence of large-scale corporations and the separation of production and consumption functions. The very small number of humans who willingly choose to live in isolated, self-sustaining, and unified production and consumption settings, instead of contexts characterized by specialization of these tasks, is a testament to the delight humanity takes in modern consumerism. But just because humans have gained from the corporate organization of consumption does not mean those gains are without remediable problems.

Here, too, the consumer's situation is not unlike that of the shareholder. In their landmark article on the firm, Jensen and Meckling stressed that the enormous agency costs facing shareholders have clearly not been so great as to preclude millions of Americans from willingly investing their hard-earned money in corporate enterprise.⁶⁶ It is hard to think that shareholders as a class would do so if they were not made better off by it. Nevertheless, the "they must be benefitting from it" story has not been sufficient to stem decades of scholarly and policymaking attention to ever more precisely explaining the causes of shareholder exploitation and ever more finely calibrating the yoke of fiduciary obligation around directors. The fact that consumers widely patronize corporations, and often enjoy their purchases, should similarly not be taken as sufficient reason to forgo examination and reform of the firm's relationship with consumers, given theoretical and empirical evidence of consumer vulnerability to exploitation in corporate operations.⁶⁷

Berle and Means did not focus on the consumer's situation in *The Modern Corporation and Private Property*. However, in an obscure paper delivered at a conference in New York in 1930, Berle squarely addressed the consumer's predicament in an essay he titled, *The Equitable*

order business And it was of course the moment at which the metropolitan press and the department store finally came of age

Id. at 51-52.

^{65.} See id. at 30-31.

^{66.} Rhetorically, they ask: "How does it happen that millions of individuals are willing to turn over a significant fraction of their wealth to organizations run by managers who have so little interest in their welfare?" Jensen & Meckling, *supra* note 2, at 330. Their answer, of course, is that the capital markets discount equity investments by the cost of anticipated malingering and theft.

^{67.} See Yosifon, supra note 4.

Distribution of Ownership.⁶⁸ Like Coase, Berle took as his invitation for inquiry the successful Communist Revolution in Russia in 1917, just thirteen years prior to his writing. Revolutionary changes in one society, Berle mused, force other societies to approximate the changes themselves or justify anew their distinct system. "Right or wrong, the Russians have made us look at our own capitalism."⁶⁹ The general themes of his paper presaged much of what he would explore with Means in their then-unpublished book. The "rights of ownership," Berle argued, had once meant "that owners as such are entitled to the products of their property."⁷⁰ But the old view rested on the assumption that owners of property worked on or with that property, combining it with their own efforts to make it productive.⁷¹ The separation of ownership and control witnessed in the rise of the modern corporation required a new understanding of the relationship between property and ownership. Berle and his generation struggled to fill the conceptual and normative vacuum that changed social relations had created. This struggle sometimes required them to posit the existence of extraterrestrial life. "I can see, [a] Martian might say, that when you have performed the service in collecting capital, you certainly are entitled to its rental value. But why are you entitled to all of the products from it?"⁷²

Sympathetic to his Martian interlocutor, Berle set about examining who should share the benefits of industrial income and in what proportion. What is of interest here is that Berle undertook the unusual step of examining the consumer entitlement:

I should like to fire a shot at this point for the unknown factor in the situation—the customer, the man who rides on the trolley car, or buys the goods, or uses the services of the corporation. He is anonymous, unorganized, and unrepresented. Accordingly he is commonly regarded as cannon fodder, and yet, without him the machinery breaks down. At this very moment we are having campaigns

^{68.} Adolf A. Berle, Jr., Presentation at the Conference on Business Management as a Human Enterprise at the Bureau of Personnel Administration: The Equitable Distribution of Ownership (Dec. 11, 1930) [hereinafter Berle, Equitable Distribution] (essay on file with the Seattle University School of Law Adolf A. Berle, Jr. Center on Corporations, Law & Society). The paper was collected in the conference proceedings, but it has apparently not been otherwise published. Berle himself cited the piece once in his famous exchange in 1932 with Merrick Dodd in the *Harvard Law Review*. See A. A. Berle, Jr., For Whom Corporate Managers Are Trustees: A Note, 45 HARV. L. REV. 1365, 1366 n.3 (1932). I have found no other citation to it in Westlaw's journals and law reviews database or on Google Scholar.

^{69.} Berle, Equitable Distribution, supra note 68, at 76.

^{70.} Id. at 77.

^{71.} Id.

^{72.} Id. at 78.

appealing to consumers to buy goods, not because they need them but as a matter of charity in order to keep men employed^[73] But if the customer is expected to carry the ball for some of the distance, he should also be expected to share in the score.⁷⁴

The problem is not exhaustively stated, but the notion that consumption is an essential part of corporate enterprise, and that what the consumer is entitled to is not obvious, is clearly posed. Berle tries to figure out how to get the consumer her share of the corporate "score" (i.e., the gains to trade). He thought the solution might lie in "scientific pricing":

It is obviously not feasible to declare a dividend to him. For one thing we do not know who he is, nor where he can be found.^[75] But there is a way of accomplishing the result; and certain corporations are beginning to adopt it. In place of charging him with what the traffic will bear at any given time, the policy is beginning to creep in of charging him a reasonable amount over and above the cost of the good sold to him They justified it by saying it created goodwill. Another way of putting it would be that the customer's part in buying just at the moment was a considerable one; and that he was entitled to compensation for it. Instead of paying him a dividend at the end of the year, he was allowed to get his goods at somewhat below market value The result of this so-called scientific pricing ... is to render to the consumer a service at a fixed base cost, plus remuneration; and to relinquish to him so much of the profits of the enterprise as might be obtained by merely charging the market price—a price frequently far higher than is warranted by the cost.⁷⁶

Berle's faith that "scientific pricing" could provide anything like a deductively applicable formula for firms to deploy in their dealings with consumers was very likely misplaced.⁷⁷ But it is worth recovering his basic idea that consumers may be "entitled" to—or, in modern economic parlance, may be better off with—a rule that provides them with something other than simply "what the market will bear."

^{73.} This appeal, heard by Berle in the midst of the Great Depression, rings in the contemporary ear as reminiscent of President George W. Bush's call for Americans to consume as a way of helping the country to recover from the 9/11 attacks.

^{74.} Berle, Equitable Distribution, supra note 68, at 80.

^{75.} But see infra text accompanying note 154 (suggesting that this may be more plausible today than in Berle's day).

^{76.} Berle, Equitable Distribution, supra note 68, at 81.

^{77.} *Cf.* F. A. Hayek, *The Use of Knowledge in Society*, 35 AM. ECON. REV. 519, 519 (1945) (doubting the plausibility of nonmarket "scientific" methods of setting prices).

Berle's reflection on the consumer interest did not make it into The Modern Corporation, published just two years later. Instead, the book focused on the shareholder agency problem that resulted from the separation of ownership and control, and the broad political questions raised by the emergence of powerful firms run by unaccountable managers.⁷⁸ Mainstream corporate law scholarship subsequent to that book has more or less taken resolution of the shareholder agency problem as the defining task of the field.⁷⁹ The arguments and mechanisms reviewed in the previous Part have been the result.⁸⁰ Unworried by the questions that puzzled Berle and his Martian, corporate law scholars have assumed that the consumer interest is indeed well-served by market prices, as long as markets function competitively. After all, it is consumers, not firms, who ultimately say what market prices will be. Consumer decisions about what and when to buy set the prices not only of final goods but also of the raw materials, labor, management, and capital needed to make the goods. Under this view, consumers are well-placed to manage their own interests in corporate enterprise. Directors should look after shareholders; consumers can look after themselves.⁸¹

I have repudiated this consumer sovereignty story in previous work.⁸² If directors are charged with making profits for shareholders, then they will have the incentive and power to engage in business practices that manipulate consumer perceptions about important product attributes, such as the social consequences or the personal risks involved in a product's consumption. The strong version of the consumer sovereignty story presumes that consumers are capable of inspecting goods and services themselves and of monitoring their stake in a corporate association through "take it or leave it" decisions at the cash register. But many product attributes, like genetically modified nicotine levels in tobacco or trans-fatty acids in French fries, are difficult for consumers to see on

^{78.} BERLE & MEANS, supra note 1.

^{79.} See Diamond, *supra* note 61, at 164 (arguing that Berle and Means had two goals in *The Modern Corporation*: "to explore . . . the central governance problem of the public corporation . . . but also to situate a solution to that problem within their social democratic vision of governance. The former has lived on . . . the latter has gone down the memory hole.").

^{80.} See supra note 46; see also Parts II.B-C.

^{81.} In the nexus-of-contracts framework, these are the "terms" that corporate law imposes on shareholder and consumer contracts within the corporate nexus. *See supra* text accompanying notes 18–23. Some scholars assert that the law is more ambiguous regarding the obligations of directors. *See, e.g.*, Christopher M. Bruner, *The Enduring Ambivalence of Corporate Law*, 59 ALA. L. REV. 1385, 1394 (2008). This Article accepts the mainstream view that "despite occasional academic arguments to the contrary, the shareholder wealth maximization norm . . . indisputably is the law in the United States." BAINBRIDGE, *supra* note 52, at 53.

^{82.} See Yosifon, supra note 4.

their own; other attributes, like escalating interest rates on subprime mortgages, are difficult to understand. This criticism is deepened by modern behavioral science, which reveals a magnitude of consumer vulnerability to cognitive and behavioral manipulation that is vastly understated in the standard account.⁸³ Capital markets will reward firms that engage in profitable manipulation and punish firms that fail to do so. This kind of business conduct will result even where firm managers do not consciously intend or direct it—it will emerge as if guided by an invisible hand.⁸⁴ Where corporations are operating in competitive capital and managerial markets, the "market price," which worried Berle but reassures most modern theorists, reflects both the costs (to consumers) and benefits (to sellers) of this manipulation.

Confronted with this kind of argument, proponents of the dominant regime have typically argued that if the threat of such corporate conduct is real, then it should be restrained not by altering the shareholder primacy norm in firm governance, but by relying on local, state, and federal governments to impose regulatory restrictions on firm operations (for example, through consumer protection statutes).⁸⁵ But this recourse to external regulation is implausible given the public choice problems that the shareholder primacy norm in firm governance helps to engender.⁸⁶ Corporations, relatively small in number and with narrow interests, enjoy collective action advantages over "anonymous, unorganized, and unrepresented"⁸⁷ consumers. Shareholder-oriented firms thus have an advantage over consumers in the competition for regulatory favor, and firms predictably succeed in stunting the development of regulatory institutions that might effectively guard against corporate overreach. Shareholder-primacy theory might be coherent if corporations could be re-

^{83.} See generally Jon Hanson & David Yosifon, *The Situational Character: A Critical Realist Perspective on the Human Animal*, 93 GEO. L.J. 1 (2004) (reviewing social-science evidence that casts doubt on the plausibility of the rational-actor model of human behavior on which most standard economic analysis rests).

^{84.} See Jon Hanson & David Yosifon, *The Situation: An Introduction to the Situational Character, Critical Realism, Power Economics, and Deep Capture*, 152 U. PA. L. REV. 129, 196 (2003) (describing this process as "power economics"); *see also* Armen A. Alchian, *Uncertainty, Evolution, and Economic Theory*, 58 J. POL. ECON. 211 (1950) (making a similar argument about markets rewarding profitable firm decisions irrespective of the intent or talent of managers, but not attending to the problem of market manipulation). My thanks to Mike Munger for alerting me to Alchian's article.

^{85.} See, e.g., Michael C. Jensen, *Value Maximization, Stakeholder Theory, and the Corporate Objective Function*, 7 EUR. FIN. MGMT. 297, 309 (2001) ("[R]esolving externality and monopoly problems . . . is the legitimate domain of the government in its rule-setting function.").

^{86.} See David G. Yosifon, *The Public Choice Problem in Corporate Law: Corporate Social Responsibility After Citizens United*, 89 N.C. L. REV. 1197, 1198 (2011).

^{87.} Berle, Equitable Distribution, *supra* note 68, at 80.

strained from influencing the political process. But in *Citizens United v. FEC*, the Supreme Court held that the First Amendment precludes government from restricting corporate political activity.⁸⁸ So long as *Citizens United* is good constitutional law, shareholder primacy is bad corporate theory. I have argued that these critiques counsel in favor of altering corporate governance law to require firm directors to actively attend, in fiduciary fashion, not only to shareholders, but to consumer interests as well.⁸⁹

Part IV, below, will build on my analysis of the corporate manipulation of consumer perceptions and government regulations by problematizing other dimensions of the modern consumer's relationship to corporate operations generally. Specifically, it will pursue the analysis developed in Part II, concerning the role that "lock-in" plays as both a feature and bug of corporate organization, and examine how consumer interests are potentially compromised by lock-in dynamics in ways similar to, and perhaps worse than, the lock-in problems that confront shareholders. This will help deepen the case for extending the fiduciary obligations of corporate boards.

IV. CONSUMERS LOCKED INTO THE CORPORATE NEXUS

A. Consumer Lock-In Problems

1. The No-Put Consumption Default Rule

In a fundamental way, consumers are usually just as locked into their corporate purchases as shareholders are locked into their corporate investments. Once a consumer makes a purchase, the default rule is that she cannot require the firm to buy back the good at its initial purchase price or at its market price at some future date. Of course, some retail corporations alter this default rule by including some kind of short-term put option with the purchase—in other words, a return policy. But a great deal of consumption adheres very closely to the default rule, including small purchases like fast food, and big-ticket items like cars and houses. Few "cash-outs" for consumer goods are possible in any context after ninety or 180 days.⁹⁰ Thereafter, the consumer is locked in.

^{88.} See Citizens United v. FEC, 130 S. Ct. 876, 913 (2010).

^{89.} See David G. Yosifon, Discourse Norms as Default Rules: Structuring Corporate Speech to Multiple Stakeholders, 21 HEALTH MATRIX 189, 212 (2011).

^{90.} See, e.g., Return Policy, TARGET CORP., http://www.target.com/HelpContent?help=/sites/ html/TargetOnline/help/returns_and_refunds/returns_and_refunds.html (last visited May 19, 2012). Target's "return policy" allows returns on "most items" within ninety days if unused and within forty-five days for electronics. Id. "[M]usic, movies, video games, and software," as well as collecti-

Of course, this basic level of consumer lock-in differs from the shareholder variety in the important sense that consumers can at least use the goods they purchase, whereas shareholders have only a highly contingent claim on potential future profits after investing their cash.⁹¹ But this distinction is meaningful only if the product purchased turns out to have real value to the consumer. A rancid hamburger is of no greater use to a consumer than a share in a firm run by malingerers and thieves is to a shareholder. Indeed, there is less utility in the hamburger, since the firm may someday stumble into the hands of more honest, diligent management, but the rancid hamburger will never turn fresh. Moreover, after purchase, the consumer may find that she simply no longer likes, or has any use for, the good. In contrast, any cash dividends that may ultimately come to the shareholder will be fully fungible and can be put to any economic use.

2. Switching-Costs Lock-In

A deeper kind of consumer lock-in problem emerges when an initial act of consumption endows what then becomes an "incumbent" product with sunk-cost advantages that make switching to otherwise preferable products too costly or difficult.⁹² These "switching costs" include learning and habituation costs associated with product use.⁹³

92. See generally Paul Klemperer, Markets with Consumer Switching Costs, 102 Q.J. ECON. 375 (1987) [hereinafter Klemperer, Consumer Switching]; see also Paul Klemperer, The Competitiveness of Markets with Switching Costs, 18 RAND J. ECON. 138 (1987); Paul Klemperer, Entry Deterrence in Markets with Switching Costs, 97 ECON. J. 99 (1987).

93. Scholars in this area describe six distinct categories of switching costs: (1) transactions costs (including the opportunity costs of searching out a new supplier); (2) contractual costs (such as loyalty programs, which induce consumers to stick with an incumbent supplier or lose the chance at future discounts); (3) informational costs (including the cost of learning how to use a new product from a different supplier); (4) compatibility costs (such as when consumers purchase "add-ons" that work exclusively with a baseline product, like software for an idiosyncratic computer platform); (5) uncertainty costs (including unfamiliarity with what satisfaction a new supplier will deliver); and (6)

bles, "are non returnable if opened," and "[g]iftcards, prepaid cell phones, prepaid cards (including music, game and phone cards), or other items that carry financial [value] have varying return policies." *Id.* "Photo-ID may be required for in store returns." *Id.*

^{91.} While the lock-in framework provides a useful way of analyzing stakeholder associations with the firm,neither shareholders nor consumers have a lingering claim on anything specific or tangible that is *literally* locked into the firm, in the sense that either stakeholder owns something that is being kept from them inside the firm. As stated previously, the corporation is an entity distinct from its shareholders. *See supra* text accompanying notes 32–44. When a shareholder turns capital over to the firm, it belongs to the firm, and the shareholder has no further claim to it. Similarly, when the consumer turns over money to the firm, the money belongs to the firm and the consumer has no further claim to it. Thus, when I speak of "lock-in," I am referring to interests or associations that these stakeholders have in firm activities that cannot easily be disassociated from the firm through exit and which therefore precludes threat of exit as an effective means of keeping the firm's managers working hard and honestly in service of those interests.

Switching-cost lock-in is perhaps "irrational" in the sense that fully rational, preference-maximizing actors would anticipate and safeguard against it. But it is nevertheless a common occurrence among real human beings. Where it is present, consumers cannot credibly use the threat of exit to force firms to attend to their interests, and corporations may respond by increasing prices or decreasing quality, in service of their obligation to increase profits for shareholders.⁹⁴

94. Although "[t]he empirical literature on switching costs is much smaller and more recent than the theoretical literature," researchers have found "evidence for the importance of switching costs" in many different consumer markets, including breakfast cereals, computers, computer programs, bank loans, cell phones, credit cards, cigarettes, supermarkets, air travel, television programming, online brokerage services, electricity supplies, bookstores, and automobile insurance. *See* Joseph Farrell & Paul Klemperer, *Coordination and Lock-In: Competition with Switching Costs and Network Effects, in* 3 HANDBOOK OF INDUSTRIAL ORGANIZATIONS 1967, at 1980–81 (Mark Armstrong & Robert H. Porter eds., 2007); Paul Klemperer, *Competition when Consumers have Switching Costs: An Application to Industrial Organization, Macroeconomics, and International Trade*, 62 REV. ECON. STUD. 515 (1995); *see also* Hai Che et al., *Bounded Rationality in Pricing Under State-Dependent Demand: Do Firms Look Ahead, and if So, How Far?*, 64 J. MKTG. RES. 434 (2007). Che et. al. found that breakfast cereal firms anticipate consumer reluctance to deviate from established consumption patterns and set prices accordingly. Reviewing pricing data, they conclude that

ignoring the effects of state dependence ... leads us to infer spuriously that the market is more price elastic than it is ... which puts the onus of explaining the seemingly high prices in the market on tacitly collusive pricing behavior between firms. When we correctly accommodate the effect of state dependence ... the estimated price elasticities become sufficiently smaller in magnitude so that the observed prices can be rationalized by Bertrand competition between firms.

Id. at 443

Lawrence M. Ausubel argues that the sale of "customer portfolios" at a premium in certain industries betrays the notion that markets force firms to compete on price to attract customers. Lawrence M. Ausubel, *The Failure of Competition in the Credit Card Market*, 81 AM. ECON. REV. 50, 65–66 (1991). With respect to bank-to-bank sales of credit card accounts, he notes that "typically, when a bank acquires another bank's credit card portfolio, it transfers the acquired portfolio over to its own preexisting offices and processing facilities." *Id.* at 65 n.34. Therefore,

the only portion of the "ongoing business" that the acquirer desires is the customer base. In the model of perfect competition, customers inexorably gravitate to the low-priced firm; the phenomenon of "captive" or "loyal" customers does not exist. Thus an existing base of customers, by itself, should draw no premium.

Id. Yet, Ausubel found substantial premiums in the firm-to-firm sale of credit card accounts. *Id.* at 66–68. A number of different kinds of switching costs are evident in the credit card market, including transactions costs (filling out paperwork, waiting for the card in the mail), learning costs (navigating help centers, payment procedures), and artificial/contractual costs (annual fees are billed once per year, which will cost consumers money unless they switch at exactly the right time). *Id.*; *see also* Kyle B. Murray & Gerald Haubl, *Explaining Cognitive Lock-In: The Role of Skill-Based Habits of Use in Consumer Choice*, 34 J. CONSUMER RES. 77 (2007).

psychological costs (such as where mere exposure to a product increases a consumer's affection for it, irrespective of all other product attributes). *See* Luke Garrod et al., *Competition Remedies in Consumer Markets*, 21 LOY. CONSUMER L. REV. 439, 477–80 (2009). These categories clearly overlap. For present purposes, I find it sufficient to refer herein to general "switching costs." For an analysis of consumer-loyalty programs from a theory of the firm perspective, see David G. Yosifon, *Towards a Firm-Based Theory of Consumption*, 46 WAKE FOREST L. REV. 447, 455–56, 458–62 (2011).

A principal cause of switching-cost lock-in is the widespread psychological tendency among humans to weigh present gains much more heavily than future gains, and present costs much more heavily than future costs. Social psychologists use the term "hyperbolic discounting" to describe this phenomena because humans in practice evince a discount rate that is far more extreme than one would expect a rational or prudent discounter to embrace.⁹⁵ Humans discount hyperbolically because we are relatively good at seeing and thinking about the costs and desires that are right in front of us, but we have a much harder time imagining costs and desires in the future.⁹⁶ This is not a bizarre thinking strategy for creatures with limited cognitive powers, but it does lead to predictable, recurring failures to optimize. What makes the problem of hyperbolic discounting particularly vexing in the context of consumer lock-in is that we do not see that we are bad at seeing the future. "Consumers . . . fail to anticipate the impact of future switching costs, and when the future arrives, these switching costs dominate these later decisions in ways that consumers do not anticipate when making the initial decision."⁹⁷ Economists initially assumed that switching-cost lock-in was less of a problem when the costs of switching were low in absolute terms. But consumption patterns on the internet, where search and evaluation costs are often objectively low, have revealed that even very modest switching costs can induce unanticipated lock-in.98

Switching-cost lock-in is not unique to consumers. To some extent, shareholders suffer from it as well. Having sunk costs into analyzing and buying into a particular firm, a shareholder may stick with the firm or buy new issues from it instead of exhausting new resources to divest and find better investments. But there is an important aspect of switching costs that is unique to consumers and exclusive of shareholders, and this is the costs associated with *use*. Consumer researchers Kyle Murray and Gerald Haubl define "cognitive lock-in" as obtaining when

^{95.} See Hanson & Yosifon, supra note 83, at 77–78 (reviewing social science demonstrating the hyperbolic discounting phenomena).

^{96.} See id. at 79

^{97.} Gal Zauberman, *The Intertemporal Dynamics of Consumer Lock-In*, 30 J. CONSUMER RES. 405, 406 (2003). And consumers continually make this mistake: "consumers do not learn from experience about the dynamic changes in their preferences as a function of proximity." *Id.* at 418. Cognitive lock-in can be contrasted with habitual consumption that we might describe as stemming from genuine consumer satisfaction. "Unlike traditional notions of loyalty, cognitive lock-in does not require a positive attitude towards the product, trust in the product, or objectively superior product functionality." *See* Murray & Haubl, *supra* note 94, at 78.

^{98.} Zauberman, supra note 97, at 406.

the costs associated with thinking about and using a particular product decrease as a function of the amount of experience a consumer has with it [R]epeated consumption or use of an incumbent product results in a (cognitive) switching cost that increases the probability that a consumer will continue to choose the incumbent over competing alternatives.⁹⁹

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The "using" dimension to cognitive lock-in distinguishes consumer lockin from shareholder lock-in and provides a way of understanding switching costs as, in a sense, a more serious problem for the former than the latter. Indeed, legal scholars assert that investors do not usually experience psychological commitments to particular stocks or companies, as they might with regard to a kind of pickle or toilet paper. Most investors treat investments with the same mix of risk and return potential as perfectly substitutable.¹⁰⁰

It is possible that the presence of consumer switching costs can lower prices for consumers in some circumstances.¹⁰¹ Where there are significant switching costs, the argument goes, sellers must dramatically slash prices to "unlock" consumers from competitors. Switching costs thus force sellers to lower prices to compensate for the costs that new consumers face in coming to them.¹⁰² But leading scholars in this area conclude that "things do not usually work so well."¹⁰³ Instead, markets with switching costs evince highly competitive seller behavior at the market formation stages, followed by exploitative pricing once market shares are established.¹⁰⁴ This dynamic process happens in the formation of wholly new markets, and it also happens generationally as new consumers enter for the first time into already-established markets, as for example when banks offer "gifts" (the proverbial toaster) and cash incentives to college students who open bank accounts that only later will

^{99.} Murray & Haubl, supra note 94, at 77.

^{100.} See West v. Prudential Sec., Inc., 282 F.3d 935, 939 (7th Cir. 2002) (Easterbrook, J.) ("There are so many substitutes for any one firm's stock that the effective demand curve is horizontal. It may shift up or down with new information but is not sloped like the demand curve for physical products." (citing Myron S. Scholes, *The Market for Securities: Substitution Versus Price Pressure and the Effects of Information on Share Prices*, 45 J. BUS. 179 (1972))).

^{101.} See, e.g., Jean-Pierre Dubé et al., Do Switching Costs Make Markets Less Competitive?, (Sept. 2008) (unpublished manuscript), *available at* http://ssrn.com/abstract=907227.

^{102.} See id. at 21 (finding such results in consumer markets for frozen orange juice and margarine).

^{103.} Farrell & Klemperer, *supra* note 94, at 1972; *see also* Joseph Farrell & Carl Shapiro, *Optimal Contracts with Lock-In*, 79 AM. ECON. REV. 51, 51 (1989) ("Once the buyer is locked-in and can no longer readily switch to another supplier, the seller's *ex post* monopoly power can lead to inefficiency, in which case we call it opportunism.").

^{104.} Klemperer, Consumer Switching, supra note 92, at 377.

begin to charge fees.¹⁰⁵ After formation, markets with switching costs resemble collusive markets in terms of pricing patterns, but with no evidence of actual collusion that would reach the antenna of antitrust regulators.¹⁰⁶ This kind of dynamic pricing may benefit consumers in the short run, but it is not clear that it benefits them in the long run. In any event, the post-market-formation consumer predicament is one that prevailing corporate governance theory fails to anticipate, explain, or justify.¹⁰⁷

The switching-cost problem undermines the viability of market mechanisms that are often invoked as being easily available to safeguard consumer interests. In particular, it blunts the viability of the consumer threat to forego subsequent consumption or to switch brands if a firm does not carefully attend to consumer welfare in the course of pursuing shareholder wealth.

3. Consumption as Locked-In Investment

The emergence of modern corporations coincided with the development for the first time of widespread markets in consumer "durables."¹⁰⁸ These are products whose services can be consumed over an extended period of time, usually several years. According to historian Martha Olney, spending on consumer durables, including big-ticket items such as sewing machines, furniture, and automobiles, as well as smaller items like books and jewelry, grew dramatically after World War I, as Americans shifted their disposable income from savings to consumption.¹⁰⁹ Like other economists, Olney argues that the purchase of a

109. According to Olney, before 1914,

^{105.} Id. at 390.

^{106.} See id. at 390-91.

^{107.} See Farrell & Klemperer, *supra* note 94, at 1971 ("When switching costs are high, buyers and sellers actually trade *streams* of products or services, but their contracts only cover the present." (emphasis added)).

^{108.} See Martha L. Olney, Buy Now, Pay Later: Advertising, Credit, and Consumer Durables in the 1920s, at 47–48 (1991).

only 3.7 percent of disposable income was used on average to purchase major durables, but in the 1920s, fully 7.2 percent, a near doubling, was used for this purpose. Simultaneously, the share of disposable income that was saved nearly halved; the personal saving rate fell from 6.4 to 3.8 percent, a drop in the rate of 42 percent.... Such a sharp decline in the personal saving rate is astounding, particularly since the 1920s were rather prosperous years and we usually expect saving rates to climb, not fall, during periods of prosperity.

Id. at 117. Olney argues that there was a "Consumer Durables Revolution" in the 1920s that "is not characterized simply by greater household expenditure for durables over time [Instead,] demand for most but not all durable goods changed—households responded more aggressively to changes in relative prices and income (elasticities increased), or some more general change occurred in household demand." *Id.* at 179; *see also id.* at 6–7.

durable good is as much an investment as it is consumption, because the consumer is pouring capital into assets that she expects to yield consumption opportunities in the future.¹¹⁰ But consumers of durable goods investments enjoy far less protection of their future interests within corporate decision-making than do investors in a firm's stock, despite the fact that both stakeholders are locked into their respective investments.

Like any long-term investment, the value of a consumer durable can decrease over time for a number of reasons. For example, a refrigerator manufacturer may fail altogether and be unavailable to make ordinary repairs of the machine years after its purchase. In such a situation, the consumer is no worse off than the firm's shareholders, who also lose if the firm fails.¹¹¹ But if the manufacturer decides to maximize profits years after the consumer's purchase by closing local retail service outlets or ceasing to manufacture spare parts, the consumer's loss becomes the equity investor's gain.¹¹²

Some consumer durables have attributes akin to equity investments, in the sense that their value is unfixed, indeterminate, and potentially limitless. Computers and their progeny (smart phones, tablets, etc.) hold out the prospect of providing consumption opportunities for an extended period of time, as well as becoming *more* useful over time as new software is created (whether by the consumer herself or by someone else) to run on the machine.¹¹³ Consumers are locked into this kind of equity in-

^{110.} Id. at 51; see also Thomas J. Holmes, Consumer Investment in Product-Specific Capital: The Monopoly Case, 105 Q.J. ECON. 789, 789 (1990) ("Consumer investment in product-specific capital is a feature of the markets for many products, especially if one takes a broad perspective of what this capital decision can be.").

^{111.} Sometimes when firms fail consumers gain at the expense of shareholders. If a firm invests in a product that does have utility to the consumer but fails to generate a profit, then equity investments have subsidized consumer welfare. But this would happen only by accident. It would be a consequence of mistaken, failed corporate governance. When the opposite happens, and shareholders benefit at the expense of consumers, it may be considered a success of corporate governance within the dominant paradigm. This Article explores the problems and potential remedies associated with this latter outcome.

^{112.} Oliver Williamson noted that consumer durables present "special" problems for consumers. WILLIAMSON, *supra* note 3, at 309 n.17.

^{113.} Jensen and Meckling were aware of the consumer lock-in problem in their seminal *Theory of the Firm* article, but neither they nor other scholars gestated the idea to maturity. They wrote:

[[]I]n certain kinds of durable goods industries the demand function for the firm's product will not be independent of the probability of bankruptcy. The computer industry is a good example. There, the buyer's welfare is dependent to a significant extent on the ability to maintain the equipment, and on continuous hardware and software development. Furthermore, the owner of a large computer often receives benefits from the software developments of other users. Thus if the manufacturer leaves the business or loses his software support and development experts because of financial difficulties, the value of the equipment to his users will decline. The buyers of such services have a continuing interest in the manufacturer's viability not unlike that of a bondholder, except that their bene-

vestment, just as shareholders are locked into the producing firms. But the interests of the two stakeholders are not necessarily aligned. For example, when Texas Instruments abruptly exited the home computer market in the 1980s, it left more than one million consumers with home computers that would be very difficult to service or upgrade, and for which no new software programs would be developed.¹¹⁴ Shareholders benefited from the firm leaving its consumers behind, as Texas Instruments' stock price shot up significantly after the firm made its move. Indeed, Texas Instruments continues to thrive today, outperforming the market since its decision to exit the home computer market. A more recent example of this kind of left-behind durable goods lock-in is seen in Hewlett-Packard's abrupt decision in 2011 to withdraw from the personal computer business and to discontinue support of the operating system used for its ill-fated TouchPad tablet line.¹¹⁵

4. Network or Path-Dependence Lock-In

A fourth kind of lock-in that potentially compromises consumer interests is "network" or "path-dependence" lock-in. This kind of lock-in can be driven by corporate operations in a manner that is particularly harmful to consumers, even as it benefits shareholders. Network lock-in can emerge when "the benefits of owning a product, or using a standard . . . increase with the number of people doing the same thing."¹¹⁶ In such circumstances, "a head start could easily be decisive in determining which one of several competing products or technologies would survive

fits come in the form of continuing services at a lower cost rather than princip[al] and interest payments.

Jensen & Meckling, supra note 2, at 341-42.

Jensen and Meckling's important insight has not been pursued by their many readers. I have found no scholarship that pursues their abortive comparison of consumer and capital stakes in corporate enterprise. A search of Westlaw's journals and law reviews reveals 1372 articles citing Jensen and Meckling's *Theory of the Firm*, but just one article containing a pinpoint citation to pages 341 or 342, on which Jensen and Meckling observed the similarities between consumer and capital investments in the firm. *See* William J. Shafer & Mark H. Van de Voorde, *Book Review: The Debt Equity Choice by Marcus W. Masulis*, 15 J. CORP. L. 363, 369 n.63 (citing Jensen & Meckling, *supra* note 2, at 342, for the proposition that restrictive covenants are used to reduce agency costs of debt).

^{114.} See Andrew Pollack, *Texas Instruments' Pullout*, N.Y. TIMES, Oct. 31, 1983, at D4, *available at* http://www.nytimes.com/1983/10/31/business/texas-instruments-pullout.html?pagewanted =1. A significant portion of those stuck holding Texas Instruments' computers were public schools, which had invested heavily in such computers as improvements to their educational programs. *Id.*

^{115.} Brian X. Chen, *In Flop of H.P. Touchpad, an Object Lesson for the Tech Sector*, N.Y. TIMES, Jan. 2, 2012, at B1, *available at* http://www.nytimes.com/2012/01/02/technology/hewlett-packards-touchpad-was-built-on-flawed-software-some-say.html?pagewanted=all.

^{116.} Stan J. Liebowitz & Stephen E. Margolis, How the Lock-In Movement Went Off the Tracks 2 (Oct. 26, 2010) (unpublished manuscript), *available at* http://ssrn.com/abstract=1698486.

in the marketplace."¹¹⁷ When this happens, it would be the head start—"a personal quirk, an accident, some fleeting advantage"—rather than "merit" that determines market equilibrium.¹¹⁸

The example most widely used to illustrate the problem of network lock-in is the "accidental" but continued dominance of the QWERTY keyboard design over the supposedly superior "Dvorak" keyboard design.¹¹⁹ The QWERTY came first, and throughout the early decades of the twentieth century people learned to type based on that layout. When individuals, businesses, governments, and schools began to buy typewriters at higher rates, they bought machines with the QWERTY layout because that was the layout that most people knew, which caused even more people to learn the layout. The allegedly superior Dvorak keyboard design, invented in 1936, requires less hand and finger movement and produces fewer errors in touch-typing than the QWERTY layout. But the Dvorak design never really caught on and slipped into obscurity as the path of QWERTY was ever more deeply worn.¹²⁰ Uncountable writing hours may have been lost to the network lock-in of the OWERTY keyboard; untold thousands of stories, love letters, and-perhaps worst of all—law review articles, left unwritten.¹²¹

There is a spirited academic debate about whether QWERTY really is an example of network lock-in. Critics of the familiar story claim there is no independent evidence that Dvorak truly is the better design. They insist that if Dvorak really was better, wealth-maximizing actors would have adopted it.¹²² The dispute over the truth of the QWERTY lock-in story is a proxy for the broader debate about how widespread network or path-dependent inefficiencies really are. While even the most strident critics of the QWERTY example agree that network lock-in is a genuine phenomenon, the real debate is over whether network lock-in is a "prob-

^{117.} Id.

^{118.} Id.

^{119. &}quot;QWERTY" refers to the layout of letters on the keyboard starting in the upper-left-hand corner, whereas "Dvorak" refers to a different keyboard design by a man named August Dvorak. *Id.* at 4. The first six keys starting in the upper-left-hand corner of the Dvorak keyboard are: '.,PYF. *See* Randy Cassingham, *The Dvorak Keyboard: A Brief Primer*, DVORAK-KEYBOARD, http://www.dvorak-keyboard.com (last visited Feb. 12, 2012).

^{120.} See Leibowitz & Margolis, supra note 116.

^{121.} Other purported examples of adverse network effects in consumer markets include telephones, radio, television, computers, computer software, credit cards, VHS videos, and compact discs. *See* Farrell & Klemperer, *supra* note 94, at 2009–15. Examples of potentially adverse network effects beyond consumer markets have also been explored in areas as wide-ranging as human languages and law (particularly corporate law). *Id.* (citing Larry Ribstein & Bruce Kobayashi, *Choice of Form and Network Externalities*, 43 WM. & MARY L. REV. 79, 79–140 (2001)).

^{122.} Leibowitz and Margolis summarized the debate (and claimed victory for their anti-QWERTY position) in *How the Lock-In Movement Went Off the Tracks, supra* note 116.

lem" in the sense that it can be solved with some policy intervention that is less costly than simply allowing it to fester.¹²³ And that debate seems to quickly degenerate into a version of generic "markets versus regulation" arguments: how can government regulators with limited knowledge and limited motivation to get the "right" answer (here the "right" product) outperform the allocative efficiency of competitive markets?¹²⁴

But the generic version of the "markets versus regulation" debate tends to pass over the structure of decision-making within institutional market actors such as corporations. My concern is with the relationship between corporate governance, network effects, shareholder interests, and consumer interests. The corporate form makes possible the kind of initial capital lock-in that can create first-mover advantages that lead to network lock-in. This may increase returns to the first-movers' shareholders while undermining potential value for consumers generally. As I read Paul David, father of the controversial QWERTY story, he is less concerned with defending the correctness of his position on QWERTY or identifying other specific instances of recalcitrant network lock-in than he is with urging analysts and policymakers to attend to the conditions under which path-dependent lock-in can either be intensified or ameliorated.¹²⁵ Shareholder primacy in corporate governance may exacerbate it; a different firm governance regime might ameliorate it. Markets may ultimately "cure" inefficient original designs, as David's critics inevitably insist. But a great deal of time and resources may be wasted, or transferred from consumers to shareholders, as the invisible hand fumbles for that curative grasp.¹²⁶

Consider David's example of the low-memory design of the early IBM Personal Computer (PC). The design was cheap and highly profitable for IBM, Inc., the first company to dominate the consumer market in

^{123.} *Id.* at 13 ("[A]n outcome, however regrettable, for which there is no foreseeable possibility of doing better, is not an inefficiency in any relevant sense . . . The only misallocations of interest for policy purposes are those that can be remedied."); *cf.* Jensen & Meckling, *supra* note 2, at 328 n.28 ("[F]inding that agency costs are non-zero . . . and concluding therefrom that the agency relationship is non-optimal, wasteful or inefficient is equivalent in every sense to comparing a world in which iron ore is a scarce commodity (and therefore costly) to a world in which it is freely available at zero resource costs, and concluding that the first world is 'non-optimal.'").

^{124.} Liebowitz & Margolis, *supra* note 116, at 13.

^{125.} Paul A. David, *Path Dependence: A Foundational Concept for Historical Social Science*, 1 CLIOMETRICA 91, 104 (2007).

^{126.} See *id.* at 106 ("The static framework of welfare analysis... carries an ahistorical if not an anti-historical bias.... Seen in truly historical perspective, a great deal of human ingenuity... is devoted to trying to cope with the consequences of past mistakes whose economic costs are threatening to become 'serious."").

personal computers.¹²⁷ The low-memory design, however, had limited utility as more sophisticated software applications became desirable.¹²⁸ The ubiquity of the low-memory mechanism in the market created the subsequent need for the "innovation" of software design that could use "temporary memory registers," which allow more complicated programs to run on the low-memory PC than was possible under its original design.¹²⁹

David asserts that it "surely was conceivable" for IBM engineers to have come up with, and for IBM to have implemented, a design with greater memory in its initial default hardware.¹³⁰ Such a design would have precluded the need for later, *seemingly* efficient, software workarounds:

The resources spent in such perceived loss-avoidance activities are part of what we casually classify as productive investments that add to the net social product . . . Yet, some part at least could just as well be thought of as the deferred costs of regrettable decisions made in haste to be remedied at leisure—albeit sometimes for great private profit.¹³¹

The desire for private profit almost certainly explains many socially wasteful path-selection decisions. But profit motive is a very general impulse that is given specific orientation through institutional design. The design of the PC's hardware was "bounded by a parochial and myopic conception of the process in which [the engineers and firm managers] were engaging . . . [T]he decision agents were not primarily concerned with whether the larger system that might be (and was eventually) built around what they were doing would be optimized by their choice."¹³² Instead, the PC was built around the idea of maximizing profits for the firm's management). Short- or long-term consumer interests played no part in the "decision agents" thinking or discussion, except to the extent that such matters bore on the interests of shareholders.

- 127. Id. at 107.
- 128. Id.
- 129. Id.
- 130. Id.
- 131. *Id*.
- 132. Id. at 108-09.

B. The Dearth of Market and Legal Solutions to Consumer Lock-In Problems

Firms *need* to lock in consumers in much the same way that firms need to lock in assets and shareholders. Consumer lock-in is a safeguard that gives firms the repose needed to commit resources to specific production. To some degree, consumers undoubtedly benefit from their own lock-in, in part because it allows producers to make specific production investments and enables firms to sell at cheaper prices knowing their consumers will be there to buy. The point of this inquiry is not to try to cure consumer lock-in or to downplay the consumer gains that result from it. Instead, the point is to suggest that a different governance regime over consumption, rather than simply the prevailing market price, might be called for, given that consumers, like assets and shareholders, are *not* exclusively operating in the market, but are in a very real sense locked into the firm. This section examines the limited solutions that consumers presently have to their lock-in predicament, especially as compared to solutions that are available to locked-in shareholders.

1. Costly or Foreclosed Secondary Markets

Consumers and shareholders can both unlock their corporate stake by alienating their goods or stock on secondary markets. But the route to liquidity will usually prove smoother and cheaper for shareholders than consumers. Secondary markets for corporate securities are highly developed, with cheap, established brokers handling all of the legwork for investors who want out of a given firm.¹³³ Most investors in publicly traded corporations can get free of their firms through secondary markets with a phone call or a few keystrokes.

Secondary markets for most consumer goods, if they exist at all, are far more cumbersome and involve a great deal more opportunity cost. Even with the advent of online secondary markets for consumer goods, such as Craigslist, Inc. and eBay, Inc., the would-be seller must communicate directly with potential buyers, schlep items for shipping, arrange for payment, etc.¹³⁴ Securities on secondary markets are fungible—

^{133.} Berle noted that the enormous private and public resources devoted to the maintenance of security exchanges is primarily directed not at allocating capital, but at providing liquidity in corporate investments. Adolf A. Berle, *Property, Production, and Revolution*, 65 COLUM. L. REV. 1, 3 (1965). Of course, this liquidity reduces the cost of capital formation.

^{134.} Louisiana has recently forbidden "secondhand dealers" from using cash to buy or sell goods. Stephen C. Webster, *Louisiana Bans Using Cash in Sales of Second-Hand Goods*, RAW STORY (Oct. 20, 2011, 2:15 PM), http://www.rawstory.com/rs/2011/10/20/louisiana-bans-using-cash -to-buy-second-hand-goods. The legislature was apparently motivated to stem trade in stolen goods. If such a law withstands constitutional challenge, it will further limit the viability of secondary mar-

a single share of Acme is worth the same as any other single share of Acme—and their prices are established in efficient markets by sophisticated traders. Consumer goods offered on secondary markets must be physically inspected or described at a distance to establish their quality. Even mass-produced goods lose their fungibility once they have been used or even held without use outside the manufacturer or retailer's standardized dominion.¹³⁵

Furthermore, important markets in information and entertainment are taking shape in a manner that almost wholly precludes consumer exit through secondary markets. Whereas records, eight-tracks, cassette tapes, compact discs, books, and magazines could be resold if they proved unsatisfactory or exhausted their utility to the buyer, today's consumers who download music from Apple, Inc., software from Microsoft, Inc., or books and magazines from Amazon, Inc., onto their computers, phones, or tablets enjoy only an inalienable license to use the source material.¹³⁶ Without access to secondary markets, consumers in these markets are locked into their purchases in a way wholly foreign to equity holders in the firms that sell those information licenses.¹³⁷

137. Another example of contract-based secondary market preclusion is cell phone and smartphone service agreements. Apple's iPhone product provides a useful illustration. When the first generation iPhone came to market in 2007, consumers who wanted it had to agree to a two-year contract with AT&T to provide cellular and data service for the device. *See* Timothy J. Maun, Comment, *IHack, Therefore Ibrick: Cellular Contract Law, the Apple iPhone, and Apple's Extraordinary Remedy for Breach*, 2008 WIS. L. REV. 747, 750. Consumers were also initially forbidden from writing their own software for use with the phone. *Id*. Once locked into their contracts, consumers could exit only by breaching and paying liquidated damages of \$175 (styled as an earlytermination fee). *Id.* at 755, 773 n.197. Consumers were forbidden from using "their" iPhones with any service provider other than AT&T. Some tech-savvy consumers attempted to jail-break "their" phones by making changes to the phones' hardware and software that would enable them to work with other carriers. Apple responded with self-help, permanently disabling "freed" phones when consumers tried to install any software updates from Apple on the devices. *Id.* at 753. Apple refused

kets as a means of resolving consumer lock-in problems. For discussion of the constitutionality of the Louisiana statute, see Eugene Volokh, *Louisiana Bans Secondhand Dealers From Paying Cash for Secondhand Goods*, VOLOKH CONSPIRACY (Oct. 19, 2011, 6:59 PM), http://volokh.com/2011/ 10/19/louisiana-bans-secondhand-dealers-from-paying-cash-for-secondhand-goods.

^{135.} See generally Angelika Dimoka & Paul A. Pavlou, Product Uncertainty in Online Markets: Conceptualization, Antecedents, and Consequences (Jan. 22, 2010) (unpublished manuscript), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1557862.

^{136.} Modern technology can also combine the secondary-market preclusion with the switching-cost problem. *See supra* text accompanying notes 93–94; *see also* Aaron Perzanowski & Jason Schultz, *Digital Exhaustion*, 58 UCLA L. REV. 889, 907 (2011) ("In the world of tethered digital goods, one cannot simply transfer one's apps to a new phone or one's e-books to a new reader... significantly increasing platform switching costs. Moreover, many tethered platforms do not allow user-generated data to be exported outside the device or system. For example, Amazon's Kindle and Apple's iBooks app both allow users to highlight and annotate sections of the books they purchase. However, none of these highlights or annotations can be copied or shared outside of the device—often not even with the user's other devices.").

2. Lumpiness and Unhedgability

Shareholders can protect themselves against some of the risks associated with their locked-in investments through portfolio diversification, including hedging against losses in specific firms.¹³⁸ These strategies are usually not as plausible for consumers due to a lumpiness problem. Compare the predicament of an automobile consumer with that of a shareholder in an auto corporation. The cost of Ford Motor Company's 2012 family sedan, the Fusion, is just over \$20,000.¹³⁹ If a consumer wants the Fusion, she must pay the full \$20,000. Part of the car will not do. It must be purchased in a lump, as a whole. If the consumer wants more than one car, she must pay another full \$20,000. On the other hand, a single stock of Ford Motor Company at the time of this writing was \$10.01.¹⁴⁰ Given the much smaller price per share, a shareholder has a great deal more latitude to determine just how much she wants to commit to Ford before she associates with the firm. She can also hedge her commitments to Ford against investments in competing automobile companies or competing industries, such as airlines. For a few dollars, she can buy a put option to sell her share at \$8.00, so she is not exposed to losing the full \$10.01. Or, if she is confident or risk preferring she can invest heavily in Ford, in whatever increments she desires. The consumer has no such latitude. All consumer goods, to greater or lesser extents, exhibit this lumpiness problem, and many consumer investments will be difficult to hedge.¹⁴¹

to resurrect phones that had been disabled as a consequence of jail-breaking, turning them into "iBricks." *Id.* at 753, 772 n.191. While these consumers could sell their iPhones, they could not alienate their two-year cell phone contract. This was in sharp contrast to the free alienability of equity stakes in Apple or AT&T.

The partnership between Apple and AT&T on the production side of the iPhone market presents its own interesting theory of the firm questions, which I note but do not pursue here. *Cf. id.* at 759 n.82 ("Apple was prepared to consider an exclusive arrangement to get [the iPhone] deal done. But Apple was also prepared to buy wireless minutes wholesale and become a de facto carrier itself." (quoting Fred Vogelstein, *Weapon of Mass Disruption*, WIRED MAG., Jan. 9, 2008, at 124, *available at* http://www.wired.com/gadgets/wireless/magazine/16-02/ff_iphone)).

^{138.} See RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 471–77 (5th ed. 1998) (providing an overview of portfolio theory in financial markets).

^{139. 2012} Fusion, FORD, http://www.ford.com/cars/fusion (last visited May 19, 2012).

^{140.} Ford Motor Company, GOOGLE, http://www.google.com/finance?client=ob&q=NYSE:F (last visited May 19, 2012) (including a five-year range of between about \$8 and \$19 per share). At that time, Ford had a market capitalization of \$38.20 billion. *Id.*

^{141.} Serialized consumption is a form of unwinding lumpiness. Consumers do not purchase a lifetime or a year's worth of hamburgers; instead, they buy one hamburger at a time to limit the lumpiness (so to speak) and make exit more feasible. But this is not a complete solution, given the problem of switching-cost lock-in noted in the previous section. *See supra* Part II.B.

3. The Firm's Breach Option

Common law and statutory law prescribe a default rule that consumer goods come with a warranty of merchantability-i.e., a promise that the good is reasonably fit for the purposes for which it is typically used.¹⁴² Some firms sell optional extended warranties for consumer durables, providing some opportunity to hedge against losses from investment consumption. But warranties are a limited solution to the vulnerability that consumer lock-in creates. Having made a purchase, the consumer is thereafter dependent on the firm to have the competence to continue as a going concern and the integrity to stand behind its warranty. The firm may begin to act sharply in response to warranty claims. The firm can *choose* to either honor the warranty or breach it. The firm will breach the warranty if doing so efficiently advances shareholder interests. On the other hand, the firm is fundamentally forbidden from breaching its obligations to shareholders. Individual directors or whole boards may breach their care and loyalty obligations to shareholders, but corporate law will not countenance it. Indeed, shareholders can obtain injunctions to enforce duties owed to them by the firm, whereas consumers can usually get only money damages, if they can get anything at all. A warranty allows a consumer to request that a court enforce some right against the corporation. But in most cases, consumers do not do so, as the time and expense of pursuing such a legal remedy would far outweigh any expected gains from a favorable legal outcome.¹⁴³

^{142.} See U.C.C. § 2-314 (2003) ("[A] warranty that the goods shall be merchantable is implied in a contract for their sale if the seller is a merchant with respect to goods of that kind.").

^{143. &}quot;Resort to litigation by aggrieved consumers is so rare that it does not constitute a significant pressure on warrantors." Jean Braucher, An Informal Resolution Model of Consumer Product Warranty Law, 1985 WIS. L. REV. 1405, 1406-07. "A study that examined consumer complaint behavior in a broad range of transactions found that . . . [1]ess than .2 percent of purchases where a problem was perceived resulted in the voicing of a complaint to a lawyer or court." Id. at 1455-56. Nor does the class action provide a plausible mechanism for systematically overcoming individual consumer impotence in the face of broken promises from firms. See Myriam Gilles, Opting Out of Liability: The Forthcoming, Near Total Demise of the Modern Class Action, 104 MICH. L. REV. 373, 375 (2005). Gilles notes the demise of mass tort litigation and the emergence of class-action waivers in consumer contracts, which courts are largely upholding, and concludes that "in the ongoing and ever-mutating battle between plaintiffs' lawyers and the protectors of corporate interests, the corporate guys are winning [I]t is likely that, with a handful of exceptions, class actions will soon be virtually extinct." Id.

V. CONCLUSION: THEORETICAL AND PRACTICAL REFORMS

The object is to match governance structures to the attributes of transactions in a discriminating way.

-Oliver Williamson¹⁴⁴

Transactions costs theories of the firm usually start out trying to explain what is, yet seem to end up conflating what is with what ought to be. Repeatedly, theorists draw the conclusion that "when lock-in effects are extreme, integration will dominate nonintegration."¹⁴⁵ The implication is that where we do not see integration, it must be because lock-in effects are not extreme. But such a perspective ignores the fact that there may be transactions costs impediments to formal integration even where lock-in is a serious problem. Put better, it ignores the possibility that there may be impediments to integration that can plausibly be overcome through policy intervention. The form of corporate organization and governance that prevail today did not develop solely out of an evolutionary process driven by voluntary exchanges in competitive markets; it resulted from a confluence of decisions made by a myriad of market actors and policymakers in particular historical contexts. As Jensen and Meckling recognized: "The level of agency costs depends, among other things, on statutory and common law and human ingenuity in devising contracts."¹⁴⁶

Firms are needed to solve hold-up problems that otherwise bedevil asset-specific production.¹⁴⁷ Organizational law is needed to help establish these firms.¹⁴⁸ This organizational law—corporate law—endeavors to set the default terms of corporate governance in a manner that best advances the interests of all stakeholders. Or, what is taken to be the same thing, it endeavors to set the default terms as the thousands or millions of corporate stakeholders would themselves actually set them if they could gather around a "conference table" and negotiate the terms of all contracts in the corporate nexus.¹⁴⁹ In practice, what corporate theorists do is try to figure out what they believe is the most desirable set of default terms and then argue that these would be the terms that parties would actually agree to, since they would want to make themselves better off. In this way, the default terms are draped with the vestments of

^{144.} Williamson, supra note 23, at 1544.

^{145.} Hart, supra note 20, at 1770.

^{146.} Jensen & Meckling, *supra* note 2, at 357.

^{147.} See supra text accompanying notes 26-42.

^{148.} See supra text accompanying notes 45-60.

^{149.} See BAINBRIDGE, supra note 52, at 30-31.

both efficiency and voluntarism, both woven from ideas and arguments about what stakeholders want, and how stakeholders act.

Ideas and arguments about lock-in have both explicitly and implicitly played a particularly important part in the design and justification of prevailing corporate governance norms. The ease or difficulty with which different stakeholders are thought to be able to credibly threaten exit and thereby force firms to attend to their interests has been central to determining which stakeholders should or should not receive active fiduciary attention at the level of firm governance. Shareholders, as dispersed, diversified, rationally ignorant claimants of residual profits with no right to force a cash-out of their stock, have been seen as uniquely "locked-in" and therefore exclusively entitled to the legal requirement that directors treat them with "[n]ot honesty alone, but the punctilio of an honor the most sensitive."¹⁵⁰

When we overcome our intuitions about consumption acts as involving isolated, serial transactions in spot markets-"sharp in by clear agreement, sharp out by clear performance"-it can be seen that consumers face lock-in and hold-up problems in consumption that are similar to those that are more familiarly examined in the production context.¹⁵¹ Consumption activity often requires consumers to commit assets to specific uses that limit the assets' availability for other uses. These assets include money, which once exchanged for a good is no longer easily exchangeable for other goods, services, or investments. Some consumption behavior also requires specific investment of human capital. Cognitive, emotional, and behavioral patterns, once set on a specific course of consumption, can be redeployed to some other use only at significant cost. These lock-in dynamics both enable and exacerbate consumer vulnerability to exploitative conduct on the part of firms, which driven to serve the shareholder interest, will often strive to manipulate consumer perceptions of important product attributes, and will endeavor to stem the development of government regulations that might insulate consumers from such corporate overreaching.¹⁵²

The theory of the firm teaches us that when you cannot fight, it is better to join. Corporate law imposes fiduciary obligations at the level of board governance as a solution to the problem of shareholder lock-in. This corporate law solution could also be deployed to help mitigate the problems associated with consumer lock-in that have been explored in

^{150.} Meinhard v. Salmon, 164 N.E. 545, 546 (N.Y. 1928) (describing the demands of fiduciary obligation).

^{151.} See supra text accompanying notes 62-65.

^{152.} See supra text accompanying notes 84-86.

this Article. Fiduciary attention at the level of firm governance will not "unlock" consumers any more than it presently serves to "unlock" shareholders. Instead, it would serve as an adjunct mechanism to assure that consumer interests are generally looked after within the firm when consumers cannot plausibly look after themselves or credibly threaten exit to command the firm's attention.

While introducing a multi-stakeholder corporate governance regime would work a stark nominal departure from longstanding norms in the United States, it would work only a marginal change in practice. Corporate law presently makes almost no substantive demands on directors in connection with their charge to serve shareholders. If directors are personally disinterested in a corporate decision and deliberate on the question in an informed, good-faith fashion, then corporate law will cloak the decisions they reach with "business judgment rule" protection. Courts do not second-guess business judgments by imposing liability for or enjoining unpopular, unprofitable, or even disastrous corporate decisions. To do so would substitute the business judgment of shareholders, courts, or some other institution for the acumen of the disinterested, skilled, attentive, faithful corporate directors. This standard would be maintained in a regime that imposes on directors of publicly traded corporations fiduciary obligations to consumers. Such a standard would require directors to become informed on and actively, sincerely deliberate about the impact of corporate decisions on the firm's consumers.¹⁵³ It would require nothing substantive, and would not second-guess informed, good-faith decisions. In reality, it would not require or likely result in a radical transformation of corporate governance practices. Any change would likely be at the margins of corporate conduct.¹⁵⁴

^{153.} This Article has focused on consumers, but the prescription can be more broadly deployed. This procedural approach could also be used to force corporate attention to other stakeholders, such as workers, creditors, or local communities.

^{154.} In other work, I have suggested the possibility of more extensive corporate governance innovations that might advance otherwise vulnerable consumer interests, including giving consumers access to lawsuits to enforce directors' obligations to them, allowing consumers to participate in the election of corporate directors, and giving consumers access to the corporate proxy mechanism for the purpose of bringing "consumer proposals" before the corporate electorate, a system that would function similarly to the "shareholder proposal" mechanism currently available under the federal securities laws. This kind of consumer involvement would have been mechanically infeasible in the past, *cf. supra* text accompanying notes 73–75, but modern business corporations have actually created the conditions that make it plausible today. Retailers routinely track extensive information about their consumers' purchasing patterns through loyalty-program cards and identification numbers that are scanned or entered at the point of purchase. These kinds of technologies can be employed to more deeply involve consumers in corporate governance. Yosifon, *supra* note 4, at 302–11. While these ideas are worth pursuing, I am more confident in the operational plausibility of the multi-stakeholder governance regime described in this Article.

This may seem milk-toasty and either inapposite to the serious, cold-blooded business of corporate operations, or else a total waste of time. Quite to the contrary, the going view in mainstream corporate law scholarship is that these kinds of process obligations imposed on the corporate boards of directors provide substantial benefits to shareholders. The duty to actively deliberate about one's obligations in the presence of a peer group that has similar obligations, we are told, triggers psychological and motivational dynamics that yield more careful, thoughtful, ethical, and quality decisions.¹⁵⁵ Corporate law already relies on the power of these disciplining behavioral dynamics to justify the vast discretion it provides to directors to manage the corporate enterprise.¹⁵⁶ Governance, not the market, is corporate law's final bastion for capital. Consumers may find useful refuge there as well.

^{155.} See BAINBRIDGE, supra note 52.

^{156.} See supra text accompanying notes 53-55.